

Army Lodging Wellness Recommendation



Fort Leonard Wood - Draft Submittal

August 14, 2003

3D/I

Fort Leonard Wood

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Introduction

Section 1 Wellness Recommendation

The Army Lodging Wellness Program is conducted under the direction and guidance of Headquarters Army, Lodging Division (CFSC). The goal of the Fort Leonard Wood Lodging Wellness Plan is to provide a comprehensive assessment and planning tool to support long term capitalization of Army Lodging facilities. The Demand Analysis determines installation Lodging requirements, and reviews off-post Lodging availability and cost, arriving at the most economical solution for meeting total transient requirements and providing a final determination of the appropriate number and configuration of on-post Lodging rooms. Individual Lodging facility condition (building and building systems) and functional assessments are included with both recommendations and costs. Facility improvement and renovation versus replacement/new construction recommendations are developed based on the individual facility assessments and cost. A Lodging Master Plan for the installation is developed including renovation, replacement/new construction, and proposed new facility siting. A final recommendation defines the method for achieving the final wellness solution for the installation and will assist with project planning

Methodology

Demand

- Demand for Lodging facilities is analyzed and adjusted for atypical past occurrences and for expected changes in the installation's population, housing, or mission. Two primary methods are used to calculate the optimum number of rooms: the number necessary to meet 80% of official demand and the number projected to be the most efficient from an operating cost perspective.
- The off-post private market is assessed for capacity and representative rates. A determination is made if the private market has the capability to handle overflow requirements of official demand.
- Room mix recommendation is based on the segmentation of the Permanent Change of Station (PCS)/Temporary Duty (TDY) mix and the expected lengths of stay. This produces the final determination of the appropriate number and configuration of rooms for the installation.

Assessment

- Existing Lodging facilities are assessed based on building and building system conditions followed by an assessment for

conformance to the Army Lodging functional standards. Facilities assessed to be in fair to good condition, and meeting the majority of functional requirements, are considered for renovation. Renovation of Lodging facilities found in poor condition and configured significantly different than current standards will typically exceed 50% of the replacement costs and are recommended for replacement/new construction. This decision is supported by renovation cost comparisons as well as the assessment documentation.

- The age, condition, and existing configuration of some of the existing Lodging buildings support a finding of replacement through new construction in lieu of renovation.
- Force protection construction criteria has a significant impact on new construction. This Wellness recommendation, including building assessment, site analysis, and proposed Lodging construction, incorporates these requirements from the UFC 4-010-01, in our analysis and recommendations. Consistent with this guidance, force protection mitigation is not considered in renovation unless the renovation cost exceeds 50% of the replacement cost for a facility.

Demand Summary

Based on the historic and expected demand pattern at this facility, it is our recommendation that the number of rooms be sized using the “80% Demand Without Exodus” criterion. Using this criterion, we expect an occupancy rate of 77% which meets 82% of the projected official demand.

Room Count and Mix Recommendation

1,532 rooms

Proposed room mix:

- 330 standard guest rooms;
- 1,142 extended-stay guest rooms offering a kitchenette;
- 60 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette.

The demand analysis has determined a need of 1,532 rooms; however, based on existing and proposed building configurations, the actual number recommended for the Fort Leonard Wood Wellness Plan will be 1,549 rooms.

Lodging Summary

The following Lodging for Fort Leonard Wood is summarized by building, including number of existing rooms and number of proposed rooms determined as part of the installation wellness recommendation. The table also indicates the number of rooms required for a new Lodging facility based on buildings not proposed for re-use due to poor existing conditions and high renovation costs. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration.

Building Number	Existing Rooms					Wellness Recommendation (FY 08)			
	Total Rooms	Std Rms 300 sf	Extend. Stay Rms 300 sf	Family Suites 450 sf	Other Rooms	Total Rooms	Std Rms 300 sf	Extend. Stay Rms 300 sf	Family Suites 450 sf
Wellness Recommendation based on Demand Analysis									
						1532	330	1142	60
Existing Lodging Facilities									
430	2				2	0			
441	1				1	0			
443	1				1	0			
444	1				1	0			
446	1				1	0			
448	1				1	0			
2030	70			70		68			68
2040	1				1	0			
2041	1				1	0			
2042	1				1	0			
2043	1				1	0			
2051	1				1	0			
3211	87		81	6		89		89	
3212	87		81	6		89		89	
3213	87		81	6		89		89	
3214	87		81	6		89		89	
3231	72			72		36		36	
3232	72			72		36		36	
3233	96			96		48		48	
3234	72			72		36		36	
3241	72			72		36		36	
3242	72			72		36		36	
3243	72			72		36		36	
3244	72			72		36		36	
3251	72			72		36		36	
3252	72			72		36		36	
3253	72			72		36		36	
3254	72			72		36		36	
4100	40		32	8		37		37	
4101	40		32	8		37		37	
4102	43		35	8		43		43	
4103	44		40	4		41		41	
4104	47		39	8		45		45	
4110	25		25			0			
4111	24		24			0			
4112	25		25			0			
4113	16			16		0			
4114	17			17		0			
4115	17			17		0			
Totals	1656	0	576	1068	12	1071	0	1003	68
New Proposed Lodging Facility									
						478	330	148	
Total Lodging Rooms									
						1549	330	1151	68

Summary of Room Count and Mix based on Configuration

- 1,549 rooms
 - 330 standard guest rooms;
 - 1,151 extended-stay guest rooms offering a kitchenette;
 - 68 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette.

Cost Summary

Project Cost

The following table summarizes the Condition Analysis, Renovation, and Replacement Cost by individual Lodging facilities. The Wellness Recommendation indicates cost by building based on recommendation, including the proposed facility cost.

Building Number	Existing Units					Wellness Recommendation (FY 08)			
	Total Rooms	Condition Analysis Cost*	Renovation Cost**	Replacement Cost	% Condition Analysis or Renovation Cost Ratio	Total Rooms	Total Cost	Renovation Cost	New Construction Cost
Existing Lodging Facilities									
430	2	***	\$ 834,370	\$ 1,074,165	77.68%	0			
441	1	***	\$ 249,890	\$ 461,480	54.15%	0			
443	1	***	\$ 185,190	\$ 304,110	60.90%	0			
444	1	***	\$ 221,050	\$ 359,360	61.51%	0			
446	1	***	\$ 273,055	\$ 394,545	69.21%	0			
448	1	***	\$ 179,375	\$ 304,110	58.98%	0			
2030	70	*****	\$ 3,932,650	\$ 9,516,525	41.32%	68		\$ 3,932,650	
2040	1	***	\$ 203,210	\$ 304,110	66.82%	0			
2041	1	***	\$ 203,210	\$ 304,110	66.82%	0			
2042	1	***	\$ 203,210	\$ 304,110	66.82%	0			
2043	1	***	\$ 203,210	\$ 304,110	66.82%	0			
2051	1	***	\$ 211,045	\$ 316,405	66.70%	0			
3211	87	*****	\$ 3,105,830	\$ 8,999,215	34.51%	89		\$ 3,105,830	
3212	87	*****	\$ 3,085,595	\$ 8,999,215	34.29%	89		\$ 3,085,595	
3213	87	*****	\$ 3,105,830	\$ 8,999,215	34.51%	89		\$ 3,105,830	
3214	87	*****	\$ 3,105,830	\$ 8,999,215	34.51%	89		\$ 3,105,830	
3231	72	*****	\$ 1,337,410	\$ 3,953,005	33.83%	36		\$ 1,337,410	
3232	72	*****	\$ 1,337,410	\$ 3,953,005	33.83%	36		\$ 1,337,410	
3233	96	*****	\$ 1,784,485	\$ 4,621,260	38.61%	48		\$ 1,784,485	
3234	72	*****	\$ 1,337,410	\$ 3,593,005	37.22%	36		\$ 1,337,410	
3241	72	*****	\$ 1,337,410	\$ 3,593,005	37.22%	36		\$ 1,337,410	
3242	72	*****	\$ 1,337,410	\$ 3,593,005	37.22%	36		\$ 1,337,410	
3243	72	*****	\$ 1,337,410	\$ 3,593,005	37.22%	36		\$ 1,337,410	
3244	72	*****	\$ 1,337,410	\$ 3,593,005	37.22%	36		\$ 1,337,410	
3251	72	*****	\$ 1,338,525	\$ 3,593,005	37.25%	36		\$ 1,338,525	
3252	72	*****	\$ 1,338,525	\$ 3,593,005	37.25%	36		\$ 1,338,525	
3253	72	*****	\$ 1,338,525	\$ 3,593,005	37.25%	36		\$ 1,338,525	
3254	72	*****	\$ 1,338,525	\$ 3,593,005	37.25%	36		\$ 1,338,525	
4100	40	*****	\$ 1,599,980	\$ 3,594,680	44.51%	37		\$ 1,599,980	
4101	40	*****	\$ 1,664,795	\$ 3,594,680	46.31%	37		\$ 1,664,795	
4102	43	*****	\$ 1,539,020	\$ 4,105,740	37.48%	43		\$ 1,539,020	
4103	44	*****	\$ 1,672,415	\$ 3,935,010	42.50%	41		\$ 1,672,415	
4104	47	*****	\$ 1,609,105	\$ 4,277,030	37.62%	45		\$ 1,609,105	
4110	25	\$ 1,350,670	****	\$ 2,397,820	56.33%	0			
4111	24	\$ 1,342,255	****	\$ 2,485,600	54.00%	0			
4112	25	\$ 1,363,430	****	\$ 2,485,600	54.85%	0			
4113	16	\$ 1,332,300	****	\$ 2,569,770	51.85%	0			
4114	17	\$ 1,336,345	****	\$ 2,569,770	52.00%	0			
4115	17	\$ 1,336,345	****	\$ 2,569,770	52.00%	0			
Totals	1656					1071	\$ 40,921,505	\$ 40,921,505	\$ -
New Proposed Lodging Facility									
						478	\$ 47,374,295		\$ 47,374,295
Total									
						1549	\$ 88,295,800	\$ 40,921,505	\$ 47,374,295

- * The Condition Analysis Cost is for making the building well based on Army Lodging Standards without changing how the building functions.
- ** The Renovation Cost is for making the building well based on Army Lodging Standards including making functional changes.
- *** If the Condition Analysis Cost is under 50% of the Replacement Cost, the Renovation Cost is used.
- **** If the Condition Analysis Cost is over 50% of the Replacement Cost, a Renovation Cost is not included.
- ***** Renovation Cost includes Condition Assessment items and Renovation Cost to meet Army Lodging Standards.

Cost per Room Comparison

The Wellness Recommendation includes review of off-post Lodging costs compared to the proposed renovation and new construction costs on-post. The renovation and new construction costs include operating costs, capital assessment costs, and sustainable capital expenditures. The following table summarizes this comparison per room for FY08.

	Renovation	New Building	Total
Cost per Room at Fort Leonard Wood	\$ 39.72	\$ 46.95	\$ 41.95
Off Post Cost per Room	\$ 67.91	\$ 67.91	\$ 67.91
Difference between On-Post and Off-Post Lodging per room	\$ 28.19	\$ 20.97	\$ 25.96
% Savings of On-Post to Off-Post Lodging	41.5%	30.9%	38.2%

The Cost Per Room at Fort Leonard Wood is based on:

Renovation / New Construction Cost w/ inflation to FY 08

Current Operating Cost w/ inflation to FY 08

Cap Ex Cost

Capital Assessment Cost to FY 08

Off Post Cost is based on current room rate average with inflation to FY 08

Due to this cost difference and the savings of 38.2%, it is our recommendation that the Army construct a new Lodging facility and retain 22 existing facilities at Fort Leonard Wood in lieu of using off-post lodging to support the determined demand requirement. Off-post Lodging will continue to be used for demand beyond the on-post room requirement.

Recommendations / Conclusions

The Wellness Recommendation for Fort Leonard Wood is to continue the use of over 60% of the existing Lodging buildings, with the exception of buildings 430, 441, 443, 444, 446, 448, 2040, 2041, 2042, 2043, 2051, 4110, 4111, 4112, 4113, 4114, and 4115, and to construct a new main Lodging facility to accommodate the public and back-of-the house spaces and 478 rooms, for a total of 1,549 rooms, to meet the 1, 532 room requirement. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration. Existing Lodging facilities that do not meet condition and functional requirements based on cost shall be removed from the Lodging inventory. A synopsis of recommended building actions follows:

- Construct a new Lodging facility to include 330 standard-stay and 148 extended-stay rooms. This building will be planned to include public and back-of-the-house Lodging functions for the total on-post Lodging inventory.

- Retain Building 470 as the primary Lodging check-in and administrative building until the new building is constructed.
- Remove Lodging buildings 430, 441, 443, 444, 446, 448, 2040, 2041, 2042, 2043, 2051, 4110, 4111, 4112, 4113, 4114, and 4115 from the Lodging inventory due to the condition of the existing building systems and/or the cost to renovate to meet Army functional criteria

Cost Summary

The cost for this recommendation will be:

Renovation of Existing Buildings	\$40,921,505
New Lodging Facility	\$47,374,295
Total	\$88,958,800

Phasing

Recommend the following phasing as funding is identified.

- Minimize investment in infrastructure for buildings 430, 441, 443, 444, 446, 448, 2040, 2041, 2042, 2043, 2051, 4110, 4111, 4112, 4113, 4114, and 4115
- Construct new Lodging facility prior to removing existing Lodging facilities from inventory and removing back-of-the-house and public spaces from building 470.
- Renovate building 470 to remove back-of-the-house and public spaces.
- Remove buildings 430, 441, 443, 444, 446, 448, 2040, 2041, 2042, 2043, 2051, 4110, 4111, 4112, 4113, 4114, and 4115 from Lodging inventory, and return them to the Installation.

Section 2 Lodging Master Plan



Installation Summary

Fort Leonard Wood, established in 1940 as a basic training center, is home to the 1st Engineer Brigade, the 3rd Training Brigade, the 3rd Chemical Brigade, and the U.S. Army Military Police School. Providing engineer basic and advanced individual training, the 1st Engineer Brigade also hosts the Engineer Officer Basic Course (EOBC) and Engineer Officer Advanced Course (EOAC). The 3rd Training Brigade trains over 16,000 soldiers annually in three phases of basic combat training. The 3rd Chemical Brigade operates the U.S. Army Chemical School to provide safe and realistic training experience designed to create "chemical veterans."

The Fort Leonard Wood Installation Design Guide, completed in 2002, incorporates specific installation requirements. Land use, future development, and architectural compatibility are integral components of the Guide. Current Lodging room night requirements, Army guidance on Lodging facility design standards, and force protection construction standards required additional analyses and were incorporated into the recommendations of the Lodging Wellness Plan.

The character of Fort Leonard Wood has been preserved and enhanced through the use of precast stone and red brick construction.

Master Plan Summary

Lodging facilities at Fort Leonard Wood were constructed in various phases and are located in several areas of the installation. A thorough condition and functional assessment of the existing buildings noted deficiencies in some of the facilities. The primary Lodging check-in area and administrative function is located in Building 470, which is shared with several other installation functions and is not part of this assessment.

The proposed Fort Leonard Wood Lodging Master Plan reflects 1,549 Lodging rooms while retaining over 55% of the existing Lodging buildings. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration. This new facility, in conjunction with 22 existing Lodging facilities, will combine required rooms, public areas and service functions into a cohesive Lodging facility in support of the installation requirements.

Siting of the new 478 room Lodging facility is recommended adjacent to the main education complex, Building 3203, Thurman Hall.

Existing Lodging Facilities



Building 430

Building 430, constructed in 1944 and renovated in 1999, is a single story structure housing 2 DVQ suites without full kitchens and a shared dining area, full kitchen, lounge, guest laundry and media room located between the two suites. The facility is in good condition but does not comply with the lodging size standards. The cost to renovate this building to the new Lodging standards and configuration will exceed the 50% replacement cost.

Our recommendation is to remove building 430 from the Lodging inventory, allowing the installation to determine an alternate use for this facility. This facility will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Building 441

Building 441, constructed in 1990, has one DVQ with a full kitchen. The facility is in good condition but does not meet current Army Lodging standards. The cost to renovate this building to the new Lodging standards and configuration will exceed the 50% replacement cost.

Our recommendation is to remove building 441 from the Lodging inventory, allowing the installation to determine an alternate use for this facility. This facility will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Building 443, 444, 446 and 448

Buildings 443, 444, 446, and 448, constructed in 1941, are single-story wood-framed buildings, each housing one family suite with full kitchen. The facilities are in fair condition but do not meet current Army Lodging standards. The cost to renovate these buildings to the new Lodging standards and configuration will exceed the 50% replacement cost.

Our recommendation is to remove buildings 443, 444, 446, and 448 from the Lodging inventory, allowing the installation to determine an alternate use for these facilities. These facilities will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Building 2030

Building 2030, constructed in 1992, is a two-story brick building housing 70 2-bedroom suites with full kitchens. The rooms are accessed through 5'-0" wide interior corridors, and elevator access is not provided. This facility is in good condition, though the room sizes are slightly smaller than the standard at 400 square feet. It is felt this deficiency is not significant enough to renovate the room size considering the new age of this building. There are a few deficiencies in the back-of-the house and public space requirements. The cost to make condition assessment improvements and renovations to bring the building up to current Army Lodging standards will not exceed the 50% replacement cost.

Our recommendation is to retain building 2030 in the Fort Leonard Wood Lodging inventory. This facility will remain in the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Building 2040, 2041, 2042 and 2043

Building 2040, 2041, 2042 and 2043, constructed in 1941, are all similar sized single-story wood-framed buildings, each housing one family suite with full kitchen. These facilities are in fair condition but do not meet current Army Lodging standards. To renovate these buildings to the new standards and configurations will exceed the 50% replacement cost.

Our recommendation is to remove buildings 2040, 2041, 2042 and 2043 from the Lodging inventory, allowing the installation to determine an alternate use for these facilities. These facilities will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Building 2051

Building 2051, constructed in 1941, is a single story structure housing one DVQ suite with full kitchen. The facility is in good condition but does not meet current Army Lodging standards. The cost to renovate this building to the new standards and configuration will exceed the 50% replacement cost.

Our recommendation is to remove building 2051 from the Lodging inventory, allowing the installation to determine an alternate use for this facility. This facility will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Buildings 3211, 3212, 3213, 3214

Buildings 3211, 3212, 3213, and 3214, constructed in 1989, are 3-story buildings. All of these facilities house 81 extended stay rooms with full kitchens and 6 family suites with full kitchens. Building 3212 also houses a breakfast area and snack area for this campus located within a converted room. Rooms are accessed via a 5'-0" wide interior hallway, and an elevator is included in each building. Additional public areas provided include gear wash rooms with private entrances and guest laundry and vending areas located on each floor. A separate support facility is located within this campus but is not included in this assessment.

These buildings are in fair condition and meet current Army Lodging standards. To meet the demand requirements, we recommend renovating the family suites to extended stay rooms. To make condition assessment improvements and renovations to bring these facilities up to the current Army Lodging standard will not exceed the 50% replacement cost.

Our recommendation is to retain Buildings 3211, 3212, 3213, and 3214 in the Fort Leonard Wood Lodging inventory. These facilities will remain in the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Buildings 3231, 3232, 3233, 3234, 3241, 3242, 3243, 3244, 3251, 3252, 3253 and 3254

These twelve brick buildings, constructed in 1999, are 4-story structures arranged into groups of four, with a single-story common building shared within each group. The single-story buildings (3230, 3240, and 3250) contains a guest laundry, break room, conference area, and breakfast area but are not included in this assessment. Buildings 3231, 3232, 3234, 3241, 3242, 3243, 3244, 3251, 3252, 3253 and 3254 house 72 rooms each, with each pair of rooms sharing a kitchen and bath area. Building 3233 houses 96 rooms, with each pair of rooms sharing a kitchen and bath area. These buildings are in good condition but do not comply with current Army Lodging standards.

Due to the new age of this building, we recommend removing the common wall between the pairs of rooms, providing slightly oversized extended stay rooms which generally meet Lodging standards. The cost to make condition assessment and renovation improvements will not exceed the 50% replacement cost.

Our recommendation is to retain buildings 3231, 3232, 3233, 3234, 3241, 3242, 3243, 3244, 3251, 3252, 3253, and 3254 in the Fort Leonard Wood Lodging inventory. These facilities will remain in the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Buildings 4100, 4101, 4102, 4103, 4104

Buildings 4100, 4101, 4102, 4103, and 4101, constructed in 1965 and 1966 and renovated between 1998 and 2000, are 2-story brick buildings. Buildings 4100 and 4101 house 32 extended stay rooms with full kitchens and 8 family suites with full kitchens. Building 4102 has 35 extended stay rooms with full kitchens, 8 family suites with full kitchens, and a breakfast area and snack area for this campus located within a converted room. Building 4103 has 40 extended stay rooms with full kitchens and 4 family suites with full kitchens. Building 4104 has 39 extended stay rooms with full kitchens and 8 family suites with full kitchens. Rooms are accessed through a narrow 4'-0" interior hallway, and elevator access is not provided. These buildings are in good condition.

These buildings are in good condition and meet current Army Lodging standards. To meet the demand requirements, we recommend renovating the family suites to extended stay rooms. To make condition assessment improvements and renovations to these facilities will not exceed the 50% replacement cost.

Our recommendation is to retain buildings 4100, 4101, 4102, 4103, and 4104 in the Fort Leonard Wood Lodging inventory. These facilities will remain in the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Buildings 4110, 4111, 4112

Buildings 4110, 4111, and 4112, constructed in 1973, are 2-story brick facilities. Buildings 4110 and 4112 both house 25 extended stay rooms with full kitchens. Building 4111 houses 24 extended stay rooms with full kitchen. Though these buildings meet current Army Lodging standards, they are in poor condition. To make condition assessment improvements to these facilities will exceed the 50% replacement cost.

Our recommendation is to remove buildings 4110, 4111, and 4112 from the Lodging inventory, allowing the installation to determine an alternate use for the facilities. These facilities will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.



Buildings 4113, 4114, 4115

Buildings 4113, 4114, and 4115, constructed in 1973 and renovated in 1998, are 2-story brick facilities. Building 4113 houses 16 family suites with full kitchen, and a breakfast area for the Lodging inventory is housed in a converted room. Buildings 4114 and 4115 both house 17 family suites with full kitchens. Though these buildings meet current Army Lodging standards, they are in poor condition. To make condition assessment improvements to these facilities will exceed the 50% replacement cost.

Our recommendation is to remove buildings 4113, 4114, and 4115 from the Lodging inventory, allowing the installation to determine an alternate use for the facilities. These facilities will be removed from the Fort Leonard Wood Wellness Solution and Lodging Master Plan.

New Lodging Building

The proposed replacement/new Lodging facility includes 330 standard-stay and 148 extended-stay rooms. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration. The new Lodging facility will include the public areas and back-of-the-house areas for the entire Lodging inventory.

The proposed new construction will be sited near the existing Engineering school, at the north end of the installation. The proposed building construction is steel frame with CMU infill walls, sloped standing seam metal roof, and a brick exterior veneer. The architectural guidance for Fort Leonard Wood is very specific and is incorporated into the cost of the new facility.

The mass and scale of the proposed building is critical. Based on the number of required rooms, the recommendation of this plan is to provide varying roof levels to promote interest and character, while providing relief from the scale of the facility. The building would maintain a 5-story height, with 4-story projections on either side of the entrance. The entrance would be further emphasized by a one story height covered drop-off area.

Areas and Occupancy

The following chart indicates all spaces and size for the proposed new construction based on program and the proposed conceptual building plan.

ROOM / SPACE	PROGRAMMED FLOOR AREA			PLAN FLOOR AREA
	No. Req'd	Net Area Per Room	Total Net Area	
Total Area including 9% Add On Factor (does not include Outside Areas)*			240,880	235,768
Public Areas			57,504	55,528
Exterior Entrance	N/A	N/A		-
Vestibule	1	1	-	-
Lobby (includes vestibule)	1	1,200-1,500	1,200-1,500	1,403
Front Desk	4 stations	300	300	255
Bell Cart Station	8	12	96	108
Breakfast Bar (Seat/Svc) - min.	1	1,000	1,000	971
Passenger Elevators	2 elev. @ 5 floors	64	640	660
Stairs	8	230	9,200	6,210
Public Corridors	-	-	40,000	39,721
Public Telephone Area	4	6	24	16
Vending - Full Service	3	70	210	791
Vending - Ice Only	2	30	60	409
Women - Lobby	1	350	350	266
Men - Lobby	1	350	350	266
Multi-Purpose Room - (250 s.f. min.)	1	250	250	324
Study Rooms (1 per 25 ext stay units)	6	250	1,500	1,893
Guest Laundries (2 sets w/d per 75 units)	7	192	1,344	1,241
Gear Wash Rooms - (170 s.f. min.)	4	170	680	994
Guest Bulk Storage (1 per 4 family suites)	-	25 ea. 40 w/circ.	-	-
Guest Rooms	478		143,400	143,400
Guest Room - Standard	330	300	99,000	99,000
Guest Room - Ext. Stay	148	300	44,400	44,400
Guest Room - Family Suites		450	-	-
Back-of-House Areas			20,087	20,996
Manager's Office	1	180	180	178
Assistant Manager Offices	1	120	120	167
Front Office Manager	1	100	100	100
Admin. Offices	10 staff	1,100-1,200	1,100-1,200	1,366
Cash Room	1	150	150	129
Luggage Storage	1	100	100	104
Admin. Conference Room	1	350	350	324
Housekeeping Office	1	120	120	120
Dirty/Clean Linen Storage	-	400	-	-
In-House Laundry - (500 s.f. minimum)	1	900	900	772
Receiving Office	1	75	75	109
Maintenance Area	1	600	600	758
Kitchen Prep Room	1	150	150	210
Break Room	1	420	420	305
Staff Toilet - Men	1	200	200	126
Staff Toilet - Women	1	250	250	126
Access Corridor	-	-	1,600	1,666
Receiving -min.	1	200	200	342
Housekeeping Rooms	1 per 15 units	128	4,096	5,128
Service Elevator	1	80	400	400
Data/Commo Room	1	150	150	180
Switch Closets	10	16	160	1,846
Janitor Closet	1	50	50	108
Mechanical Room	-	-	5,932	3,706
General Storage Room - (500 s.f. min.)	1	900	900	1,217
Bulk Storage Room - (500 s.f. min.)	1	900	900	620
Electrical Room	5	140	700	809
Elevator Equipment Room	1	84	84	80
Exterior			400	
Playground (Outdoor)	1	-	-	-
Grounds Maintenance	1	400	400	-

* Add on factor to cover s.f. for partitions and any space not included in numbers above.

Cost Summary

The New Construction Cost \$47,374,295

- The cost is for the initial building of 478 rooms.
- All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood.

Cost Analysis

Summary of Project Replacement Cost (based on 235,768 s.f.)

CSI	Percent	Amount
02 Site Work	2.82%	\$901,124.93
Parking Lots		\$451,728.80
Site Earthwork		\$449,396.13
03 Concrete	23.16%	\$7,412,253.36
Floor Construction		\$5,598,648.56
Slab on Grade		\$332,824.55
Stair Construction		\$149,499.00
Standard Foundations		\$1,331,281.25
04 Masonry	3.81%	\$1,220,090.27
Exterior Walls		\$1,220,090.27
07 Thermal & Moisture Protection	4.81%	\$1,539,283.78
Roof Construction		\$723,388.86
Roof Coverings		\$815,894.92
08 Doors & Windows	8.62%	\$2,757,571.77
Exterior Doors		\$42,895.93
Exterior Windows		\$2,205,760.00
Interior Doors		\$508,915.84
09 Finishes	18.84%	\$6,030,014.53
Ceiling Finishes		\$1,702,021.82
Floor Finishes		\$2,219,606.59
Partitions		\$1,179,578.83
Wall Finishes		\$928,807.30
10 Specialties	0.01%	\$3,830.14
Fittings		\$3,830.14
11 Equipment	1.92%	\$614,843.74
Commercial Equipment		\$27,346.00
Other Equipment		\$587,497.74
13 Special Construction	5.01%	\$1,602,862.63
Communications & Security		\$721,554.44
Sprinklers		\$881,308.19
14 Conveying Systems	0.76%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	15.60%	\$4,992,273.33
Cooling Generating Systems		\$2,130,050.00

Domestic Water Dist		\$976,320.00
Plumbing Fixtures		\$1,885,903.33
16 Electrical	7.16%	\$2,291,755.83
Electrical Service & Distribution		\$2,274,393.38
Site Lighting		\$17,362.45
19 FF&E	7.47%	\$2,390,000.00
Interior FF&E allowance		\$2,390,000.00
Total Raw Cost	100.00%	\$31,998,628.30

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$175,992.46
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$3,199,862.83
Total Additional Hard Cost		\$3,375,855.29

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$1,768,724.18
SIOH Conus	6.50%	\$2,414,308.50
Design	10.00%	\$3,537,448.36
08 MYr Inflation Fct	9.93%	\$4,279,329.99
Total Soft Cost		\$11,999,811.03
Total Project Cost for Replacement		\$47,374,294.61

INSERT PROPOSED CAMPUS AREA ANALYSIS DRAWING HERE

INSERT LODGING MASTER PLAN DRAWING HERE

INSERT PROPOSED LODGING FACILITY DRAWINGS (FLRS. 1-4) HERE

Overview

Section 3 Demand Analysis

Fort Leonard Wood is a premier training center for the United States Army. It is home of the Command Group, Chemical School, Engineer School, Military Police School, Training Brigades, Weapons of Mass Destruction Training and Garrison Command.

The installation's population has fluctuated considerably over the past four years: +38% between 1998 and 1999; +1.6% and +2.1% in 2000 and 2001; and +13% in 2002. These fluctuations related directly to the addition or elimination of training programs and changes in class sizes. Total population is projected to increase cumulatively by 10% in 2005 and then stabilize at that level.

Nearly 100 different classes take place at the installation throughout the year. One of the larger class sessions is seventeen weeks in duration; 400 to 650 students in each session. Most classes are more than two weeks long, contributing to extended average lengths of stay.

Ninety-four percent of Fort Leonard Wood's lodging demand comes from students/trainees who are on Temporary Duty (TDY). Permanent Change of Station (PCS) accounts for 3% of the total demand; the remaining 3% of demand comes from unofficial travelers. The majority of these unofficial travelers are families attending graduation or military retirees using the installation's medical center. Unofficial demand is not used in the calculation of recommended room inventory.

The following table describes the official demand population at this installation.

Fort Leonard Wood Official Market Demand Analysis		
	TDY	PCS
Total Demand:	94%	3%
Market Segmentation:		
Individuals	100%	< 10%
Families	0%	> 90%
Average Length of Stay (Days):		
14 days or less	16% (5 days)	68% (5 days)
More than 14 days	84% (64 days)	32% (26 days)

Source: Fort Leonard Wood Lodging Administration, compiled by 3D/I

On Post Inventory

Fort Leonard Wood has 1,655 lodging rooms in 39 buildings. Almost all the rooms have either a full kitchen or kitchenette. There are shared baths in 888 rooms.

Demand and Utilization

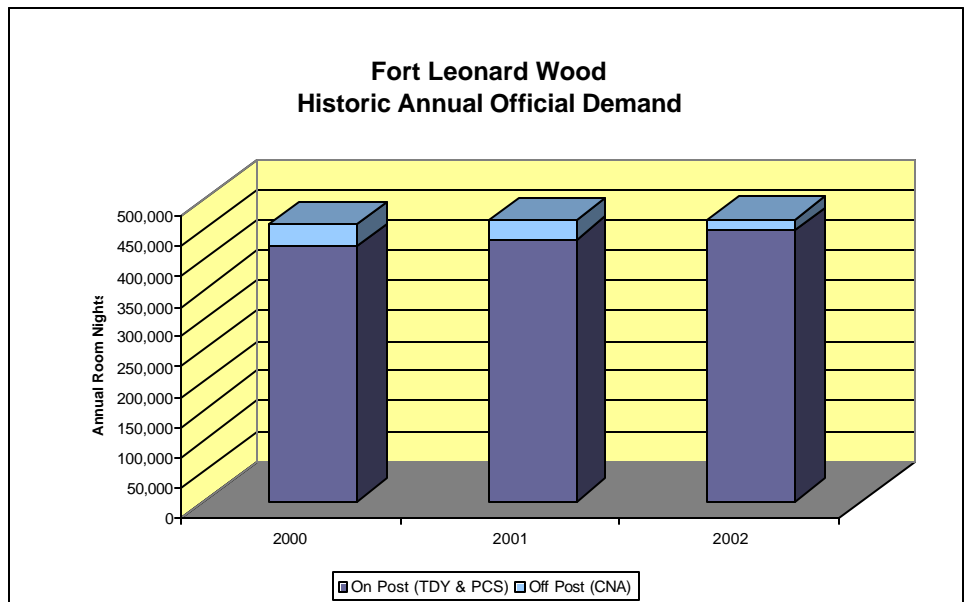
Data Summary

We only have reliable numbers for a three year comparison; 1998 and 1999 data were incomplete. The three year average including Certificates of Non-Availability (CNAs) was 1,267 room nights per day. Lodging demand increased from 1,253 rooms per day in 2000 to 1,273 in 2001; it was essentially unchanged at 1,274 in 2002. Like the population, these increases correspond to the addition or elimination of training programs and changes in class size.

CNAs ranged from an average 12 to 232 daily room nights per month in 2000 and from 0 and 124 in 2002. This equates to a reduction in annual average from 95 to 44 CNA daily room nights.

There were two Lodging Operations changes that had a strong impact on utilization and the number of CNAs being issued. The first change was in the way rooms were blocked for upcoming classes. Rather than blocking for the maximum capacity of the class, room blocking is now based on the classes' historic utilization trends. The second change was increasing the reservation staff from two to six employees. As a result, CNAs dropped by nearly 15,000 room nights from 2001 to 2002, and utilization increased.

The following chart summarizes historical data and identifies annual official demand both on and off post.

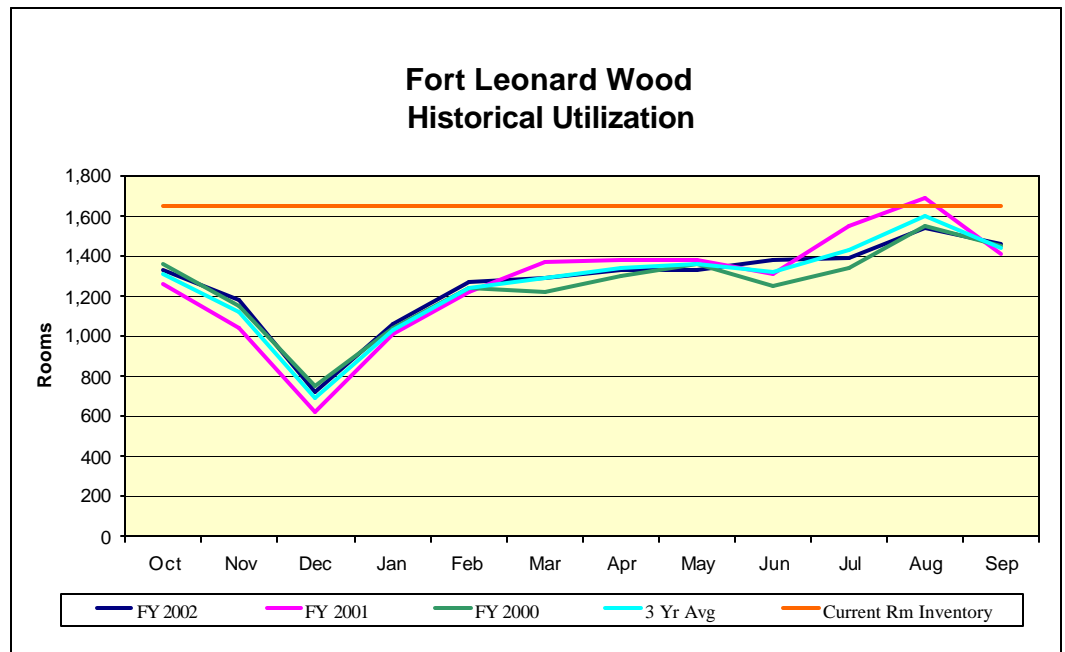


Source: Fort Leonard Wood Lodging Administration, compiled by 3D/I

Total occupancy grew steadily: +3.4% between 2000 and 2001 and + 4.2% from 2001 to 2002. Annual utilization increased each year, growing from 71.4% in 2000 to 77.2% in 2002.

Fort Leonard Wood lodging is heavily utilized by students/trainees. Historically, demand was predictable and consistent. Given the current number of available rooms and historic utilization, annualized occupancy is predicted to reach approximately 74%. Factors influencing this occupancy will be addressed later in this report.

Exclusive of December, the three year average demand ranged from 1,034 rooms (63%) to 1,596 rooms (96%); December data showed an average of 699 rooms (42%). The following graph summarizes historical utilization by month.



Source: Fort Leonard Wood Lodging Administration, compiled by 3D/I

Historical data is extremely consistent when comparing the same months across years.

Seasonality

Fort Leonard Wood lodging demand cycle shows consistent seasonality. The peak demand occurs in June, July, and August. Demand in September tended to be higher over the last three years, averaging 1,414 to 1,460 rooms per night. Demand exceeded the available 1,692 room nights per day only once in August 2001.

Factors Influencing Demand and Utilization

The installation expects no significant demographic or mission changes that would influence market segmentation.

Command priorities state that Officer Basic Course (OBC) students, Non Commissioned Officers (NCO) Academy students, Child Abuse Prevention, Intervention and Treatment (CAPIT) and Drug Abuse Prevention, Intervention and Treatment (DIVIT) students, and students with a grade of E-6 and below are to be housed on post. Students at grade E-6 and below are not allowed to drive personal vehicles or rent automobiles; therefore, it is logistically imperative to house them on post.

Having 888 rooms with shared baths constrains occupancy since these rooms cannot be shared by persons of differing gender or rank. At any time a substantial number of rooms remain vacant.

The number of core lodging customers--students/trainees--is expected to increase. There is a projected increase of 3.6% between 2002 and 2003 and another 7.8% increase projected between 2004 and 2005, resulting in an 11.4% net increase between 2002 and 2008.

A three-year process of privatization of Family Housing Operation began in October, 2001. Fort Leonard Wood has 2,472 family housing units and plans to reduce that number by 230. This reduction, coupled with the predicted 10% increase in population, may increase the waiting time for PCS personnel to move into permanent housing. However, since PCS only comprises 3% of the lodging demand at Fort Leonard Wood, it is not expected to have a significant impact overall.

Another factor that influences occupancy is the weekend exodus: classes end on Wednesday; personnel leave the installation anywhere from Wednesday to Friday; and new classes do not start until Sunday or Monday. This impacts Lodging's ability to reach an overall average occupancy beyond the previous three-year average (74%).

According to the Lodging Manager, cleaning and maintenance are especially challenging at the installation. It is not uncommon to have 300 checkouts in a two-day period and a number of times each year 600 checkouts occur at one time. Fort Leonard Wood averages 9 rooms per day out of circulation for maintenance and another 36 rooms per day that were not able to be cleaned.

Private Market Capability

There are no other military lodging operations within a 30-minute rush-hour driving time radius of the installation.

The commercial lodging market within a 30-minute rush-hour driving time radius of the installation offers approximately 1,012 rooms. It is estimated that more than 65% of these rooms are located in properties representing the major lodging chains, however the majority are properties without extended-stay facilities.

According to the Lodging Manager, while some of the off-post lodging facilities have lower government rates, few personnel utilize those properties; instead they choose the newer, nicer and higher-rate properties that are located just outside the post.

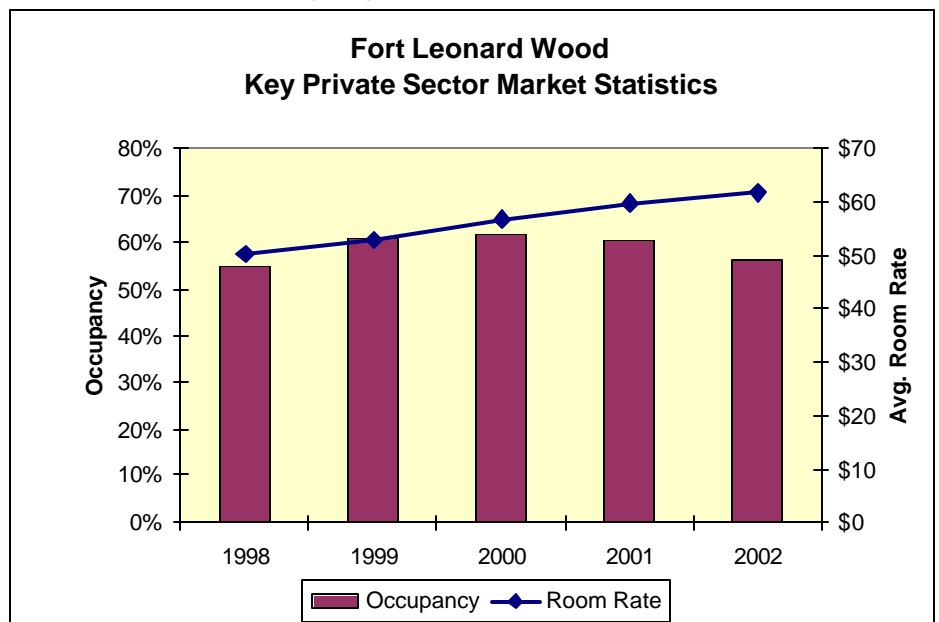
The private market is soft, with occupancies averaging between 54.7% and 61.7% the last five years. Average Daily Rate (ADR) has increased by an average of 4.5% in each of those years.

Now that the average CNA count is below 44 beds per night, Fort Leonard Wood impacts only 4.3% of the off-post market supply. During the summer months, when the CNA rate increases to between 90 and 124 rooms per night, an average of 10% of the private lodging market is used.

Monthly occupancies demonstrate seasonality. Summer demand in the private market can reach 85% and negatively impact the ability of the installation to lodge personnel off post at government rates.

The ADR increased more than 22% during the last five years. The 2002 ADR of \$61.78 is more than the average government rate charged to military personnel staying off post at referred properties; that average is \$53.17 per night. Both of these rates are well below the \$74 per diem rate for Fort Leonard Wood which increased from \$55 about six months ago. Due to the large increase in per diem rates, several of the lower quality lodging properties are beginning to remodel to improve their ability to draw military personnel and increase revenue. This will ultimately raise the average government rate.

The chart on the following page describes key private market statistics.



Source: Smith Travel Research, compiled by 3/DI

It appears the market typically has sufficient capacity, at an affordable rate, to support any overflow lodging requirements the installation may encounter except during peak summer months.

Demand Requirement Determination

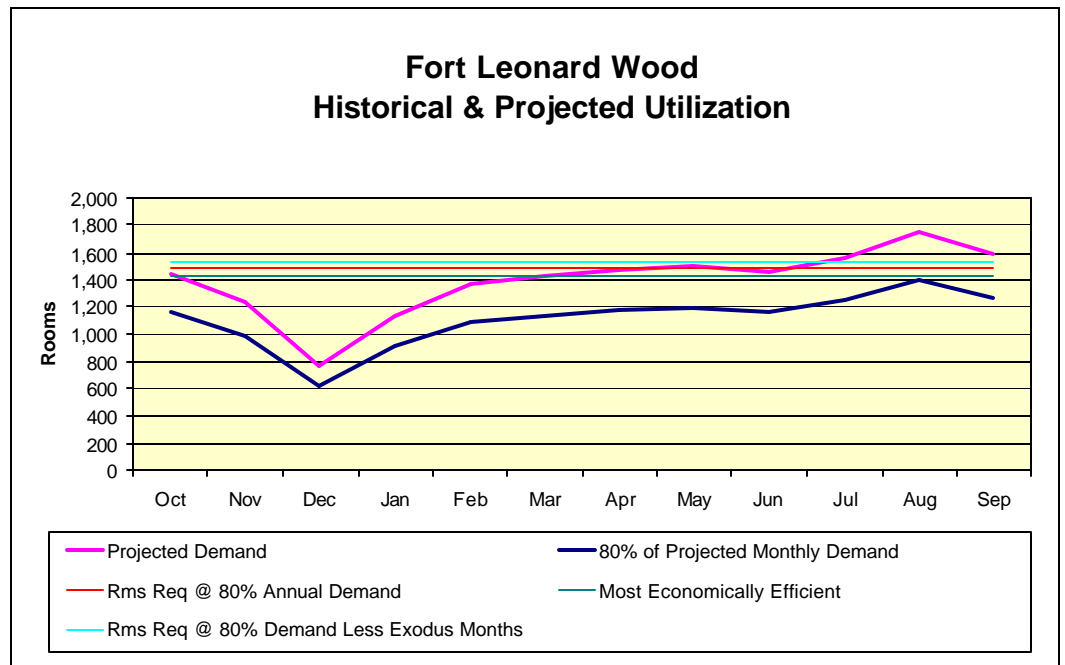
Historic official demand increased steadily over each of the past three years and with the introduction of the improved reservation system, utilization of on post lodging greatly improved. It is predicted that current demand will not subside and the population will continue to grow. Based on these factors, we determined that demand for the past three years would be the best indicator of future demand. Due to consistency in annual monthly demand, normalization is not applicable.

The Core Lodging Requirement objective is to provide sufficient lodging to meet 80% of the official demand. Using this criterion, the total number of rooms required on an annualized basis is 1,490, generating occupancy of 78%. If we further address the exodus of students during December and remove that month from the analysis, there is demand for 1,532 rooms. Because of the logistical need to house trainees/students in classes on post and the high degree of predictability of demand, we recommend the higher number of rooms.

Another method in determining optimum inventory at the installation is the application of the "Most Economically Efficient" criterion. This measure compares the cost of having a vacant room to the incremental cost of lodging personnel off post. When the costs of these scenarios are at equilibrium, the most cost efficient number of rooms will be provided from an operating cost perspective.

We dropped the four properties with lower than normal government rates from our analysis; this resulted in a \$71.80 average referral property rate. The number of rooms required to achieve equilibrium at Fort Leonard Wood is 1,421 rooms; the expected occupancy will be 78%; and 77% of the official demand will be met at an average daily rate of \$35.50 in FY08 dollars. If this criterion were used, 111 fewer rooms would be provided and approximately 40,500 room nights would be sent off post.

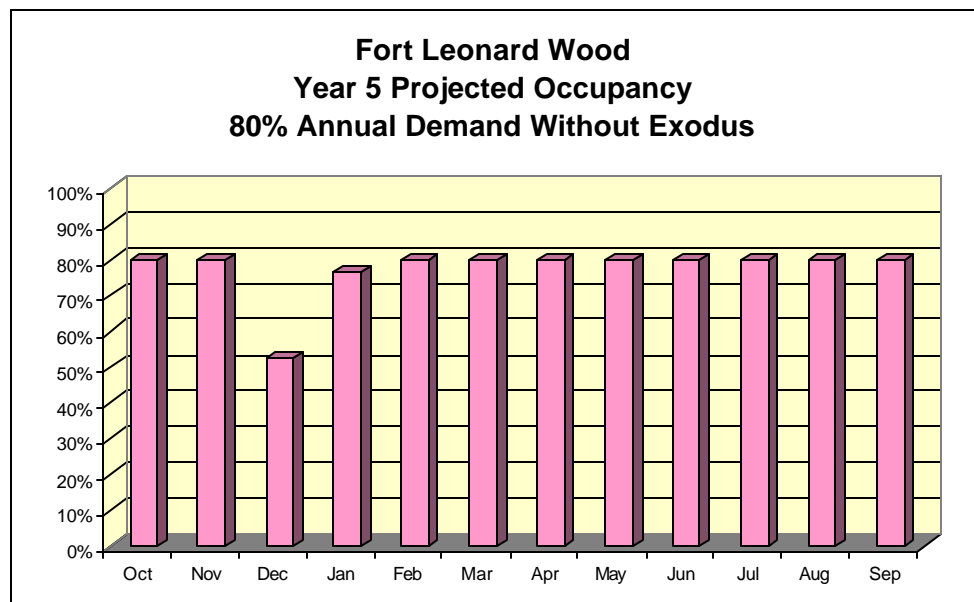
The chart below compares the alternatives to room inventory to the projected demand.



Source: Fort Leonard Wood Lodging Administration and 3D/I

Again, based on this installation's demand pattern and expected future demand, we recommend that the number of rooms to be sized using the "80% Annual Demand Without Exodus" criterion. The consistent demand for lodging throughout the year makes it more cost effective to lodge personnel on post and it supports the command priority and the logistical advantage of keeping classes in tact on the installation, especially during the high-demand summer months.

The chart on the following page presents the expected occupancy percentage on a monthly basis.



Source: 3D/I

Using the “80% Demand Without Exodus” criterion, the average occupancy is 77% and meets 82% of the official demand. On a monthly basis, occupancy varies from a low of 53% in December to 76% in January and 80% the remainder of the year.

Summary and Recommendation

- The installation’s population has fluctuated considerably over the past four years. Total population is projected to increase cumulatively by 10% in 2005 and then to stabilize at that level
- The local private sector lodging market is soft except during the summer months. It has the capacity to house personnel off post at reasonable rates except during some occasions in the summer
- Private market lodging quality is an issue; newer, closer properties with higher government rates are utilized heavily
- Official demand has been consistent over the last three years, with a slight increase in 2001 and a leveling off in 2002. In light of course offerings at the installation, the 2002 level is likely to be sustained or increase slightly
- The significant decrease in CNAs in 2002 is a result of better reservation procedures, and continuing this policy will maximize on-post occupancy and reduce the need for off-post lodging

- Based upon the pattern of demand at this installation, expected future demand and the cost-effectiveness of lodging personnel on post, we recommend the number of rooms be sized using the “80% Annual Demand Without Exodus” criterion
- Providing a room inventory equal to “80% Annual Demand Without Exodus” will generate an occupancy rate of 77%, a 3% increase over the 74% occupancy rate realized over the past three years
- While the “80% Annual Demand Without Exodus” recommended number of rooms is fewer than the inventory, a reconfiguration will be more responsive to the market segmentation at Fort Leonard Wood.

Room Count and Mix Recommendation

- 1,532 rooms
- Proposed room mix:
 - 330 standard guest rooms
 - 1,142 extended-stay guest rooms offering a kitchenette
 - 60 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette

Summary

Section 4 Facility Assessment and Plans

Each Lodging facility is detailed in this section of the report. The outline of the detail is described below:

- **Summary of Existing Lodging Facility**
- **Significant Assumptions**, identifies criteria used for renovation / replacement cost models.
- **Cost Analysis**, summarizes recommendation based on cost.
- **Attributes**, describes number of rooms and configuration.
- **Condition Analysis and Recommendations** for each of the major systems of the building.
- **Major Functional Criteria Deficit**, describes any major Functional inadequacy based on Army standards.
- **Condition Assessment / Renovation / Replacement Analysis**
 - **Condition Assessment**, summarizes building system deficiencies grouped by CSI with additional hard cost and soft cost.
 - **Renovation**, summarizes building system costs plus functional renovation costs grouped by CSI with additional hard cost and soft cost.
 - **Replacement**, summarizes replacement cost grouped by CSI with additional hard cost and soft cost.

Special Note, if a building is being retained based on the Wellness Recommendation, and has some renovations in order to meet Army Lodging standards, two cost models are used. The Condition Cost is used for wellness items and the Renovation Cost for functional renovations. These two cost need to be added together for the full renovation cost.

On this installation the following buildings use both cost models for the total renovation.

2030	3231	3242	3253	4103
3211	3232	3243	3254	4104
3212	3233	3244	4100	
3213	3234	3251	4101	
3214	3241	3252	4102	



Building 0430

Building 430 was constructed in 1944 and renovated in 1999. The 4,100 square foot facility contains 2 lodging units operating as 2 DVQs.

Significant Assumptions

The replacement and renovation cost models are based on 8 extended stay rooms and 2 family suites.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood.

Cost Analysis

Renovation Cost	\$834,370.00
Replacement Cost	\$1,074,165.00
Renovation to Replacement Cost Ratio	77.68%

Because the Renovation Cost to Replacement Cost Ratio is greater than 50%, renovation of Building 430 is not recommended.

Attributes

01.Number of Units Constructed	2
02.Number of Units Used	2
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	2
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	2
11.Operating as Extended Stay	0
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	8
15.Renovated to Family Suite	2
16.Delta renovation	8

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains two suites. The hard goods consist of headboards, nightstands, couches, easy chairs, end tables, coffee tables, tables with chairs, and desks with chairs, entertainment armoires, Parsons table, microwaves, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of concrete basement walls and concrete perimeter foundation wall and piers supporting wood laminated beams over the crawl space. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This building contains a slab on grade for the basement area. It is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by the concrete foundation walls and piers. The wood joist system is in good condition. The original wood sub-flooring visible from the basement is rotted and decayed but has been overlaid with a new plywood sub-floor and is now in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are aluminum siding in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in fair condition.
- Recommendation: Replace the windows.

Exterior Doors

- Analysis: The front and rear doublewide entry doors are fiberglass doors in good condition. The other entry doors are insulated metal doors in good condition. The mechanical room door is a doublewide metal door in good condition. The front door has a keyed lockset.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The building has as a sloped asphalt shingled roof on wood deck. The shingles were replaced in 1995 and are in fair condition.
- Recommendation: Replace the asphalt shingles.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood paneled doors in wood frames in good condition. The closet doors are mirrored sliding units in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet in good condition. The bathrooms have sheet vinyl in good condition. The common-use dining and reception areas have wood parquet flooring in good condition.
- Recommendation: Replace carpet at end of it's useful life.

Ceiling Finishes

- Analysis: The living room, bedrooms and bathrooms have painted drywall ceilings in good condition.
- Recommendation: Paint the drywall ceilings. Replace the acoustical ceiling tile.

Plumbing

Plumbing Fixtures

- Analysis: This lodging unit has four full bathrooms. The bathrooms were renovated/installed in 1999. Each bathroom contains a water closet, shower/tub combination, and porcelain lavatory mounted on a wood vanity. They are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Two residential-type electric hot water heaters installed in 1999 are located in the basement. One is a 40-gallon Rheems and the other is a 50-gallon US Craftsman. They are in good condition. Most of the plumbing lines were replaced in 1999 and are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: Each suite is heated and cooled by two split DX systems in good condition. The common areas use a central air system with a gas furnace and a split system air conditioner in good condition. The systems were installed in 1999.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: Electric service comes through two 120/208Y volt, 200-amp panels in good condition. Lighting is incandescent and is in good condition. There is a sufficient quantity of outlets in most rooms. The electrical branch distribution has been updated as of 1999 and is in good condition.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke and heat combination detectors located in each room. The system has an annunciator panel, manual pull alarms, emergency lights, and strobes and is connected to the fire department. The system is in good condition. There is also a distress alarm in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and some trees and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in fair condition. The sidewalks are in good condition except for a small section near the main road. This is in poor condition, includes steps over a culvert, and is constructed of historical stones.
- Recommendation: Resurface the access road and parking spaces. Repair the stone walkway/sidewalk.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 8 family suites and 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	22.62%	\$25,994.52
Parking: AC Pavement Damaged or Failing		\$25,994.52
04 Masonry	0.16%	\$180.80
Stone Wall Mortar: Damaged or Cracked		\$180.80
07 Thermal & Moisture Protection	12.46%	\$14,320.71
Asphalt Shingle Roof: Beyond Useful Life		\$14,320.71
08 Doors & Windows	11.11%	\$12,764.17
Al. Windows - Beyond Useful Life		\$12,764.17
09 Finishes	29.01%	\$33,339.36
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,226.52
Carpet: Beyond Useful Life		\$3,142.09
Floor Tile: Damaged or Failing		\$103.42
Interior ceilings: Paint Failing		\$1,413.41
Interior walls: Paint failing		\$722.70
Vinyl Wall Covering: Beyond expected useful life		\$14,657.40
Wall Tile: Damaged or Failing		\$12,073.82
13 Special Construction	15.95%	\$18,337.64
Fire Sprinklers: Missing or Inadequate		\$18,337.64
19 FF&E	8.70%	\$10,000.00
Hard and soft goods: Beyond expected useful life		\$10,000.00
Total Raw Cost	100.00%	\$114,937.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$632.15
Force Protection	9.00%	\$11,435.66
General Conditions	10.00%	\$11,493.70
Total Additional Hard Cost		\$23,561.51

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$13,849.85
SIOH Conus	6.50%	\$9,902.64
Design	10.00%	\$13,849.85
08 MYr Inflation Fct	9.93%	\$17,486.82
Total Soft Cost		\$55,089.16
Total Project		\$193,587.67

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	5.25%	\$25,994.52
Site Development		\$25,994.52
04 Masonry	0.04%	\$180.89
Exterior Walls		\$180.89
07 Thermal & Moisture Protection	3.61%	\$17,865.76
Roof Construction		\$6,852.46
Roof Coverings		\$11,013.30
08 Doors & Windows	15.70%	\$77,782.42
Exterior Windows		\$63,280.00
Interior Doors		\$14,502.42
09 Finishes	24.90%	\$123,369.95
Ceiling Finishes		\$21,364.09
Floor Finishes		\$35,485.82
Partitions		\$24,947.25
Wall Finishes		\$41,572.79
10 Specialties	0.18%	\$876.32
Fittings		\$876.32
11 Equipment	7.98%	\$39,550.00
Other Equipment		\$39,550.00
13 Special Construction	5.63%	\$27,890.66
Communications & Security		\$12,555.43
Sprinklers		\$15,335.23
15 Mechanical	18.67%	\$92,490.50
Cooling Generating Systems		\$37,064.00
Domestic Water Dist		\$22,374.00
Plumbing Fixtures		\$33,052.50
16 Electrical	7.95%	\$39,380.50
Electrical Service & Distribution		\$39,380.50
19 FF&E	10.09%	\$50,000.00
Interior FF&E allowance		\$50,000.00
Total Raw Cost	100.00%	\$495,381.52

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$2,724.60
Force Protection	9.00%	\$49,287.98
General Conditions	10.00%	\$49,538.15
Total Additional Hard Cost		\$101,550.73

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$59,693.22
SIOH Conus	6.50%	\$42,680.66

Design	10.00%	\$59,693.22
08 MYr Inflation Fct	9.93%	\$75,368.64
Total Soft Cost		\$237,435.74
Total Project Cost for Renovation		\$834,367.99

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	6.25%	\$45,354.25
Parking Lots		\$9,446.80
Site Earthwork		\$35,907.45
03 Concrete	12.20%	\$88,490.30
Floor Construction		\$27,120.00
Slab on Grade		\$26,532.40
Stair Construction		\$8,305.50
Standard Foundations		\$26,532.40
04 Masonry	7.91%	\$57,362.09
Exterior Walls		\$57,362.09
07 Thermal & Moisture Protection	11.17%	\$81,017.32
Roof Construction		\$15,222.24
Roof Coverings		\$65,795.08
08 Doors & Windows	11.62%	\$84,281.05
Exterior Doors		\$6,966.45
Exterior Windows		\$63,280.00
Interior Doors		\$14,034.60
09 Finishes	13.76%	\$99,828.74
Ceiling Finishes		\$15,925.00
Floor Finishes		\$35,940.66
Partitions		\$26,440.11
Wall Finishes		\$21,522.97
11 Equipment	5.45%	\$39,550.00
Other Equipment		\$39,550.00
13 Special Construction	4.40%	\$31,945.01
Communications & Security		\$14,380.56
Sprinklers		\$17,564.45
15 Mechanical	13.49%	\$97,878.34
Cooling Generating Systems		\$42,451.84
Domestic Water Dist		\$22,374.00
Plumbing Fixtures		\$33,052.50
16 Electrical	6.87%	\$49,828.48
Electrical Service & Distribution		\$47,348.13
Site Lighting		\$2,480.35
19 FF&E	6.89%	\$50,000.00
Interior FF&E allowance		\$50,000.00
Total Raw Cost	100.00%	\$725,535.57

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,990.45
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$72,553.56
Total Additional Hard Cost		\$76,544.00

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$40,103.98
SIOH Conus	6.50%	\$54,741.93
Design	10.00%	\$80,207.96
08 MYr Inflation Fct	9.93%	\$97,029.35
Total Soft Cost		\$272,083.22
Total Project Cost for Replacement		\$1,074,162.79

INSERT BUILDING 430 FLOOR PLAN HERE



Building 0441

Building 441 was constructed in 1990. The 1,339 square foot facility contains a family suite with a full kitchen. The building is functioning as a family suite.

Significant Assumptions

The replacement and renovation cost models are based on 4 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$249,890.00
Replacement Cost	\$461,480.00
Renovation to Replacement Cost Ratio	54.15%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 441 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	4
15.Renovated to Family Suite	0
16.Delta renovation	3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains three bedrooms. The hard goods consist of headboards, nightstands, dressers, couch and loveseat, easy chairs, end tables, coffee table, and a dining table with chairs, breakfast table with chairs, desk with chair, china cabinet, entertainment armoire, microwave, and lamps. The soft goods consist of curtain toppers and mini-blinds on the windows, TVs, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of concrete perimeter foundation wall and piers supporting wood joists over the crawl space. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This building does not contain a slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by the concrete foundation walls and piers. The wood joist system is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are vinyl siding are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, wood-framed, casement-type units are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The front entry door is a metal insulated door in good condition. The rear entry door is a metal door in good condition. The mechanical room door is a doublewide metal door in good condition. The front door has a keyed lockset. Both front and rear doors have storm doors in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The building has a sloped asphalt shingled roof on wood deck. The shingles were replaced/installed in 1996 and are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood in wood frames that are in good condition. Some of the closet doors are louvered wood bi-fold doors in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: This building contains no interior stairs.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are textured painted drywall in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathroom has vinyl composition tile in good condition. The kitchen and dining area have sheet vinyl in good condition.
- Recommendation: Replace the carpet tiles.

Ceiling Finishes

- Analysis: The living room, bedrooms and bathrooms have textured, painted drywall ceilings in good condition.
- Recommendation: Paint the drywall ceilings.

Plumbing

Plumbing Fixtures

- Analysis: This lodging unit has two full bathrooms. Each bathroom contains a water closet and shower/tub combination in good condition. One of the bathroom contains a porcelain lavatory on a 24" wood vanity and the other has two porcelain lavatories mounted on a 72" wood vanity. The lavatories and vanity cabinets are in good condition.

- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The residential-type 30-gallon electric hot water heater was installed in 1996 and is in good condition. The piping is in good condition.

- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: A central air system using a gas furnace and a split-system air conditioner provides heating and cooling. Both of the systems were installed in 1996 and are in good condition.

- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.

- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 120/208Y volt, 200-amp panel in good condition. The lighting is incandescent and is in good condition. There is a sufficient quantity of outlets in most rooms. The electrical branch distribution has replaced as of 1996 and is in good condition.

- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke detectors located in the hallways. Other system components were not noted. The system is in good condition.

- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchen that includes a base and wall cabinets, a refrigerator, stove, sink, and range hood. The cabinets are in good condition.

- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas, numerous trees and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in fair condition. There are no sidewalks for this building. The walkway to the front door is in good condition.
- Recommendation: Resurface the access road and parking spaces.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 4 family suites. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	3.47%	\$1,023.58
Parking: AC Pavement Damaged or Failing		\$1,023.58
09 Finishes	59.27%	\$17,499.52
Carpet: Beyond Useful Life		\$3,102.84
Interior ceilings: Paint Failing		\$393.36
Interior walls: Paint failing		\$787.38
Vinyl Wall Covering: Beyond expected useful life		\$7,757.56
Wall Tile: Damaged or Failing		\$5,458.38
13 Special Construction	20.33%	\$6,002.38
Fire Sprinklers: Missing or Inadequate		\$6,002.38
19 FF&E	16.93%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$29,525.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$162.39
Force Protection	9.00%	\$2,937.59
General Conditions	10.00%	\$2,952.50
Total Additional Hard Cost		\$6,052.48

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$3,557.75
SIOH Conus	6.50%	\$2,543.79
Design	10.00%	\$3,557.75
08 MYr Inflation Fct	9.93%	\$4,492.01
Total Soft Cost		\$14,151.30
Total Project		\$49,728.77

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	0.69%	\$1,023.58
Site Development		\$1,023.58
07 Thermal & Moisture Protection	1.61%	\$2,381.35
Roof Construction		\$2,381.35
08 Doors & Windows	5.36%	\$7,952.94
Interior Doors		\$7,952.94
09 Finishes	30.60%	\$45,406.23
Ceiling Finishes		\$8,286.52
Floor Finishes		\$13,824.10
Partitions		\$8,669.61
Wall Finishes		\$14,626.00
10 Specialties	0.24%	\$350.53
Fittings		\$350.53
11 Equipment	10.66%	\$15,820.00
Other Equipment		\$15,820.00
13 Special Construction	6.14%	\$9,108.68
Communications & Security		\$4,100.42
Sprinklers		\$5,008.26
15 Mechanical	22.55%	\$33,461.56
Cooling Generating Systems		\$12,104.56
Domestic Water Dist		\$8,136.00
Plumbing Fixtures		\$13,221.00
16 Electrical	8.67%	\$12,861.10
Electrical Service & Distribution		\$12,861.10
19 FF&E	13.48%	\$20,000.00
Interior FF&E allowance		\$20,000.00
Total Raw Cost	100.00%	\$148,365.96

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$816.01
Force Protection	9.00%	\$14,761.67
General Conditions	10.00%	\$14,836.60
Total Additional Hard Cost		\$30,414.28

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$17,878.02
SIOH Conus	6.50%	\$12,782.79
Design	10.00%	\$17,878.02
08 MYr Inflation Fct	9.93%	\$22,572.78
Total Soft Cost		\$71,111.62

Total Project Cost for Renovation	\$249,891.86
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Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.51%	\$17,166.40
Parking Lots		\$4,294.00
Site Earthwork		\$12,872.40
03 Concrete	12.37%	\$38,544.30
Floor Construction		\$11,300.00
Slab on Grade		\$9,469.40
Stair Construction		\$8,305.50
Standard Foundations		\$9,469.40
04 Masonry	10.73%	\$33,461.22
Exterior Walls		\$33,461.22
07 Thermal & Moisture Protection	9.47%	\$29,510.56
Roof Construction		\$5,495.54
Roof Coverings		\$24,015.02
08 Doors & Windows	16.24%	\$50,611.57
Exterior Doors		\$6,966.45
Exterior Windows		\$36,160.00
Interior Doors		\$7,485.12
09 Finishes	12.15%	\$37,858.77
Ceiling Finishes		\$6,031.86
Floor Finishes		\$14,816.88
Partitions		\$9,664.85
Wall Finishes		\$7,345.18
11 Equipment	5.08%	\$15,820.00
Other Equipment		\$15,820.00
13 Special Construction	3.66%	\$11,401.16
Communications & Security		\$5,132.41
Sprinklers		\$6,268.74
15 Mechanical	11.71%	\$36,508.04
Cooling Generating Systems		\$15,151.04
Domestic Water Dist		\$8,136.00
Plumbing Fixtures		\$13,221.00
16 Electrical	6.68%	\$20,821.38
Electrical Service & Distribution		\$18,341.03
Site Lighting		\$2,480.35
19 FF&E	6.42%	\$20,000.00
Interior FF&E allowance		\$20,000.00
Total Raw Cost	100.00%	\$311,703.39

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,714.37
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$31,170.34
Total Additional Hard Cost		\$32,884.71

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$17,229.40
SIOH Conus	6.50%	\$23,518.14
Design	10.00%	\$34,458.81
08 MYr Inflation Fct	9.93%	\$41,685.59
Total Soft Cost		\$116,891.94
Total Project Cost for Replacement		\$461,480.03

INSERT BUILDING 441 FLOOR PLAN HERE



Building 0443

Building 443 was constructed in 1941. The 1,331 square foot facility contains a family suite with a full kitchen. The building is functioning as a family suite.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$185,190.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	60.90%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 443 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains two bedrooms. The hard goods consist of headboards, nightstands, dressers, a couch, an easy chair, end tables, coffee table, and a dining table with chairs, desk with chair, chest of drawers, entertainment shelf, microwave, and lamps. The soft goods consist of curtain toppers and mini-blinds on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of concrete piers supporting wood joists over the crawl space. The foundation is in good condition. The metal skirting shielding the crawl space is in fair condition.
- Recommendation: Replace crawl space skirting.

Slab on Grade

- Analysis: This building does not contain a slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by concrete piers. The wood joist system is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. There are no gutters and downspouts.
- Recommendation: Install gutters and downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are aluminum siding in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units that are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The front entry door is a metal insulated door in good condition. The rear entry door is a metal door in good condition. The front door has a keyed lockset.

- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The building has a sloped asphalt shingle roof on wood deck. The shingles were replaced in 2002 and are in good condition.

- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partition and are in good condition.

- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood in wood frames in good condition.

- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition.

- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathroom has vinyl composition tile in good condition. The kitchen and dining area have sheet vinyl in good condition.

- Recommendation: Replace the carpet tiles.

Ceiling Finishes

- Analysis: The living room, bedrooms, and kitchen have acoustical ceiling tile in good condition. The bathrooms have painted drywall ceilings in fair condition.

- Recommendation: Replace the acoustical ceiling tile with a painted drywall ceiling. Paint the bathroom drywall ceilings.

Plumbing

Plumbing Fixtures

- Analysis: This lodging unit has one full bathroom. It contains a water closet and shower/tub combination in good condition. The porcelain lavatory on a 34" wood vanity is in fair condition.

- Recommendation: Replace the lavatory and vanity when the plumbing is replaced.

Domestic Water Distribution

- Analysis: The residential type 52 gallon electric hot water heater was installed in 1986 and is in fair condition. The piping is mostly original and in fair condition.
- Recommendation: Replace the water heater. Replace the domestic water system piping.

HVAC

Cooling Generating Systems

- Analysis: A central air system using a gas furnace and a split system air conditioner provides heating and cooling. Both of the systems were installed in 2003 and are in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: This building did not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 120/208Y volt, 100-amp panel in good condition. The lighting is mostly fluorescent and is in fair condition. The electrical branch distribution has been updated or supplemented but is in fair condition.
- Recommendation: Replace the branch circuits. Replace the lighting.

Communications and Security

- Analysis: The fire alarm system consists of hard wired smoke and heat detectors located in the building. The system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchen that includes a base and wall cabinets, a refrigerator, stove, sink, and range hood. The cabinets are in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas, numerous trees, and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in fair condition. There are no sidewalks for this building. The walkway to the front door is in fair condition.

- Recommendation: Resurface the access road and parking surfaces. Replace the front walkway.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.02%	\$1,443.48
Parking: AC Pavement Damaged or Failing		\$1,023.58
Walks: Concrete Walk Damaged or Failing		\$419.90
06 Wood & Plastics	1.80%	\$1,288.99
Wall Sheathing: Damaged or Failing		\$1,288.99
07 Thermal & Moisture Protection	1.78%	\$1,270.34
Gutters: Missing or Inadequate		\$1,270.34
08 Doors & Windows	6.98%	\$4,994.78
Exterior Steel Door - Beyond expected useful life		\$4,994.78
09 Finishes	46.05%	\$32,943.88
Carpet: Beyond Useful Life		\$1,993.88
Drywall Ceilings: Damaged or Failing		\$3,246.67
Interior ceilings: Paint Failing		\$540.03
Interior walls: Paint failing		\$209.34
Vinyl Wall Covering: Beyond expected useful life		\$4,491.62
Wall Tile: Damaged or Failing		\$22,462.34
13 Special Construction	8.32%	\$5,952.40
Fire Sprinklers: Missing or Inadequate		\$5,952.40
15 Mechanical	10.75%	\$7,691.62
Pipe, domestic water: Beyond expected useful life		\$3,471.36
Pipe, sewer or waste: Beyond expected useful life		\$1,664.42
Sink & vanity: Replace due to remodel		\$873.15
Water heater: Beyond expected useful life		\$1,682.69
16 Electrical	15.32%	\$10,958.96
Branch Circuits: Beyond Expected Useful Life		\$4,717.53
Fixture: Incandescent fixture beyond expected life		\$6,241.43
19 FF&E	6.99%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$71,544.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$393.49
Force Protection	9.00%	\$7,118.27
General Conditions	10.00%	\$7,154.40
Total Additional Hard Cost		\$14,666.16

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,621.02

SIOH Conus	6.50%	\$6,164.03
Design	10.00%	\$8,621.02
08 MYr Inflation Fct	9.93%	\$10,884.89
Total Soft Cost		\$34,290.95
Total Project		\$120,501.11

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	1.31%	\$1,443.48
Site Development		\$1,443.48
04 Masonry	1.17%	\$1,288.97
Exterior Walls		\$1,288.97
07 Thermal & Moisture Protection	1.49%	\$1,640.22
Roof Construction		\$1,640.22
08 Doors & Windows	12.29%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	25.84%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.16%	\$175.26
Fittings		\$175.26
11 Equipment	7.19%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	8.23%	\$9,054.26
Communications & Security		\$4,075.92
Sprinklers		\$4,978.34
15 Mechanical	21.58%	\$23,727.74
Cooling Generating Systems		\$12,032.24
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	11.63%	\$12,784.26
Electrical Service & Distribution		\$12,784.26
19 FF&E	9.09%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$109,952.31

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$604.74
Force Protection	9.00%	\$10,939.71
General Conditions	10.00%	\$10,995.23
Total Additional Hard Cost		\$22,539.67

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$13,249.20
SIOH Conus	6.50%	\$9,473.18
Design	10.00%	\$13,249.20

08 MYr Inflation Fct	9.93%	\$16,728.43
Total Soft Cost		\$52,700.01
Total Project Cost for Renovation		\$185,192.00

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 443 FLOOR PLAN HERE



Building 0444

Building 444 was constructed in 1941. The 1,056 square foot facility contains 1 lodging unit operating as 1 family suite.

Significant Assumptions

The replacement and renovation cost models are based on 3 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$221,050.00
Replacement Cost	\$359,360.00
Renovation to Replacement Cost Ratio	61.51%

Because the Renovation Cost to Replacement Cost Ratio is greater than 50%, renovation of Building 444 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	3
15.Renovated to Family Suite	0
16.Delta renovation	2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains two bedrooms. The hard goods consist of headboards, nightstands, dressers, a couch, an easy chair, end tables, coffee table, and a dining table with chairs, desk with chair, chest of drawers, entertainment shelf, microwave, and lamps. The soft goods consist of curtain toppers and mini-blinds on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of a concrete foundation wall around the mechanical room and concrete pier supports for the remaining building area. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This building contains a slab on grade for the mechanical room. It is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by the concrete foundation walls and piers. The wood joist system is in fair condition due to a sagging floor in one bedroom.
- Recommendation: Repair the sagging floor.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. The gutters exist in portions of the roof and are in good condition.
- Recommendation: Install additional gutters and downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are aluminum siding in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, wood-framed and single-hung units in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The front entry door is a metal insulated door in good condition. The rear entry door is a metal door in good condition. The mechanical room door is a double wide metal door in good condition.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The building has a sloped asphalt shingled roof on wood deck. The shingles were replaced in 2002 and are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on wood studs and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood in wood frames in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition.
- Recommendation: Install vinyl wall coverings where it is required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in good condition. The bathrooms and the kitchen have sheet vinyl in good condition.
- Recommendation: Replace the carpet tiles. Replace the sheet vinyl with ceramic tile.

Ceiling Finishes

- Analysis: The living rooms, bedrooms and kitchen have acoustical ceiling tile in fair condition. The bathrooms have painted drywall ceilings in fair condition.
- Recommendation: Replace the acoustical ceiling tile with a painted drywall ceiling. Paint the bathroom drywall ceilings.

Plumbing

Plumbing Fixtures

- Analysis: This lodging has two full bathrooms. Each bathroom contains a water closet and a shower/tub combination in good condition. One bathroom contains a porcelain lavatory on a 34" wood vanity in fair condition.

- Recommendation: Replace the fixtures when the plumbing is replaced.

Domestic Water Distribution

- Analysis: The residential type 40 gallon gas hot water heater was installed in 1996 and is in good condition. The piping is mostly original and is in fair condition.
- Recommendation: Replace the domestic water system piping.

HVAC

Cooling Generating Systems

- Analysis: A central air system using a gas furnace and a split system air conditioner provides heating and cooling. Both systems were installed in 2003 and are in good condition.
- Recommendation: Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 120/208Y volt, 100 amp panel in good condition. The lighting is mostly fluorescent and is in good condition. There is an insufficient quantity of outlets in most of the rooms. The electrical branch distribution is in fair condition.
- Recommendation: Replace the branch circuits. Replace the lighting.

Communications and Security

- Analysis: The fire alarm system consists of hard wired smoke detectors located in the building. Other system components were not noted. The system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchen that includes a base and wall cabinets, a refrigerator, stove, sink, and range hood. The cabinets are in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas, numerous trees and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt driveway is in good condition. There are no sidewalks for this building. The walkway to the front door is in good condition.
- Recommendation: Resurface the driveway and parking lot.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in poor condition.
- Recommendation: Install pole mounted light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 3 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	1.41%	\$1,023.58
Parking: AC Pavement Damaged or Failing		\$1,023.58
07 Thermal & Moisture Protection	2.34%	\$1,699.30
Gutters: Missing or Inadequate		\$1,699.30
08 Doors & Windows	13.75%	\$9,989.55
Exterior Steel Door - Beyond expected useful life		\$9,989.55
09 Finishes	24.33%	\$17,670.28
Carpet: Beyond Useful Life		\$1,945.49
Drywall Ceilings: Damaged or Failing		\$3,391.70
Floor Tile: Damaged or Failing		\$1,949.43
Interior ceilings: Paint Failing		\$618.04
Interior walls: Paint failing		\$348.69
Vinyl Wall Covering: Beyond expected useful life		\$5,027.59
Wall Tile: Damaged or Failing		\$4,389.34
13 Special Construction	6.50%	\$4,722.96
Fire Sprinklers: Missing or Inadequate		\$4,722.96
15 Mechanical	18.54%	\$13,466.70
Bath tub: Replace due to remodel		\$3,581.42
Pipe, domestic water: Beyond expected useful life		\$2,756.72
Pipe, sewer or waste: Beyond expected useful life		\$1,323.53
Restroom exhaust: Missing or inadequate		\$1,819.30
Sink & vanity: Replace due to remodel		\$1,746.30
Water closet: Replace due to remodel		\$2,239.43
16 Electrical	26.24%	\$19,058.32
Branch Circuits: Beyond Expected Useful Life		\$3,741.92
Fixture: Incandescent fixture beyond expected life		\$4,954.30
Pole mounted fixture: Beyond expected useful life		\$6,576.60
Pole mounted fixture: Missing or inadequate		\$3,785.50
19 FF&E	6.88%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$72,631.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$399.47
Force Protection	9.00%	\$7,226.42
General Conditions	10.00%	\$7,263.10
Total Additional Hard Cost		\$14,888.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,752.00
SIOH Conus	6.50%	\$6,257.68
Design	10.00%	\$8,752.00
08 MYr Inflation Fct	9.93%	\$11,050.27
Total Soft Cost		\$34,811.95
Total Project		\$122,331.94

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	0.78%	\$1,023.58
Site Development		\$1,023.58
07 Thermal & Moisture Protection	1.36%	\$1,786.01
Roof Construction		\$1,786.01
08 Doors & Windows	10.65%	\$13,983.75
Exterior Doors		\$6,966.45
Interior Doors		\$7,017.30
09 Finishes	25.96%	\$34,068.50
Ceiling Finishes		\$6,214.89
Floor Finishes		\$10,381.91
Partitions		\$6,502.21
Wall Finishes		\$10,969.50
10 Specialties	0.20%	\$262.89
Fittings		\$262.89
11 Equipment	9.04%	\$11,865.00
Other Equipment		\$11,865.00
13 Special Construction	5.47%	\$7,183.55
Communications & Security		\$3,233.79
Sprinklers		\$3,949.76
15 Mechanical	19.48%	\$25,563.99
Cooling Generating Systems		\$9,546.24
Domestic Water Dist		\$6,102.00
Plumbing Fixtures		\$9,915.75
16 Electrical	15.62%	\$20,504.98
Electrical Service & Distribution		\$10,142.88
Site Lighting		\$10,362.10
19 FF&E	11.43%	\$15,000.00
Interior FF&E allowance		\$15,000.00
Total Raw Cost	100.00%	\$131,242.25

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$721.83
Force Protection	9.00%	\$13,057.95
General Conditions	10.00%	\$13,124.23
Total Additional Hard Cost		\$26,904.01

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$15,814.63
SIOH Conus	6.50%	\$11,307.46
Design	10.00%	\$15,814.63
08 MYr Inflation Fct	9.93%	\$19,967.54

Total Soft Cost	\$62,904.25
Total Project Cost for Renovation	\$221,050.51

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.40%	\$13,111.67
Parking Lots		\$3,435.20
Site Earthwork		\$9,676.47
03 Concrete	9.58%	\$23,244.10
Floor Construction		\$9,040.00
Slab on Grade		\$7,102.05
Standard Foundations		\$7,102.05
04 Masonry	12.47%	\$30,274.43
Exterior Walls		\$30,274.43
07 Thermal & Moisture Protection	9.22%	\$22,368.12
Roof Construction		\$4,144.44
Roof Coverings		\$18,223.68
08 Doors & Windows	18.60%	\$45,155.93
Exterior Doors		\$6,966.45
Exterior Windows		\$31,640.00
Interior Doors		\$6,549.48
09 Finishes	11.94%	\$28,978.57
Ceiling Finishes		\$4,658.67
Floor Finishes		\$11,450.96
Partitions		\$7,331.57
Wall Finishes		\$5,537.36
11 Equipment	4.89%	\$11,865.00
Other Equipment		\$11,865.00
13 Special Construction	3.52%	\$8,550.87
Communications & Security		\$3,849.31
Sprinklers		\$4,701.56
15 Mechanical	11.28%	\$27,381.03
Cooling Generating Systems		\$11,363.28
Domestic Water Dist		\$6,102.00
Plumbing Fixtures		\$9,915.75
16 Electrical	6.92%	\$16,796.89
Electrical Service & Distribution		\$14,316.54
Site Lighting		\$2,480.35
19 FF&E	6.18%	\$15,000.00
Interior FF&E allowance		\$15,000.00
Total Raw Cost	100.00%	\$242,726.60

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,335.00
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$24,272.66
Total Additional Hard Cost		\$25,607.66

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$13,416.71
SIOH Conus	6.50%	\$18,313.81
Design	10.00%	\$26,833.43
08 MYr Inflation Fct	9.93%	\$32,460.99
Total Soft Cost		\$91,024.94
Total Project Cost for Replacement		\$359,359.20

INSERT BUILDING 444 FLOOR PLAN HERE



Building 0446

Building 446 was constructed in 1941. The 1,970 square foot facility contains 1 lodging units operating as 1 family suite.

Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms and 1 family suite.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$273,055.00
Replacement Cost	\$394,545.00
Renovation to Replacement Cost Ratio	69.21%

Because the Renovation Cost to Replacement Cost Ratio is greater than 50%, renovation of Building 446 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	Yes
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	1
16.Delta renovation	2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains three bedrooms. The hard goods consist of headboards, nightstands, dressers, two couches, two easy chairs, end table, and a dining table with chairs, desk with chair, entertainment shelf, microwave, and lamps. The soft goods consist of curtain toppers and mini-blinds on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of a stone and CMU foundation wall around the perimeter of the building with pier supports in the crawl space. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This building does not contain a slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by the foundation walls and piers.
- Recommendation: Repair the sagging floor.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. The gutters exist only at the front stoop but are in good condition.
- Recommendation: Install additional gutters.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are aluminum siding in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double glazed, aluminum framed, single hung units in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The front and side entry doors are metal insulated doors in good condition. The doors have keyed locksets.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The building has a a sloped asphalt shingled roof on wood deck. The shingles were replaced in 2002 and are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on wood studs and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood in wood frames in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living room and bedroom areas have carpet tile in good condition. The bathrooms and the kitchen have sheet vinyl in good condition except in one bathroom where it is marred by cigarette burns.
- Recommendation: Replace the carpet tiles. Replace the sheet vinyl with ceramic tile.

Ceiling Finishes

- Analysis: The living room, bedrooms and kitchen have acoustical ceiling tile in good condition. The bathrooms have painted drywall ceilings in good condition.
- Recommendation: Replace the acoustical ceiling tile with a painted drywall ceiling. Paint the bathroom drywall ceilings.

Plumbing

Plumbing Fixtures

- Analysis: This lodging unit has two bathrooms - a full bath and a half bath. Each bathroom contains a water closet and a porcelain lavatory on a wood vanity in good condition.
- Recommendation: Replace the fixtures when the plumbing is replaced.

Domestic Water Distribution

- Analysis: The residential type 52 gallon electric hot water heater was installed in 2000 and is in good condition. The piping is mostly original and is in fair condition.
- Recommendation: Replace the domestic water system piping.

HVAC

Cooling Generating Systems

- Analysis: A central air system using a gas furnace and a split system air conditioner provides heating and cooling. Both systems were installed in 2003 and are in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 120/208Y volt, 200-amp panel in good condition. The overhead service was replaced in 2002. The lighting is mostly fluorescent and is in good condition. There is an insufficient quantity of outlets in most rooms. The electrical distribution is in fair condition.
- Recommendation: Replace the branch circuits. Replace the lighting.

Communications and Security

- Analysis: The fire alarm system consists of hard wired smoke detectors located in the kitchen and hallway. Other system components were not noted. The system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchen that includes a base and wall cabinets, a refrigerator, stove, sink, and range hood. The cabinets are in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas, numerous trees and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking pad is in fair condition. There are no sidewalks for this building. The walkway to the front door is in good condition.
- Recommendation: Resurface the access road and parking pad.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in poor condition.
- Recommendation: Install pole mounted light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 family suites and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	1.20%	\$1,023.58
Parking: AC Pavement Damaged or Failing		\$1,023.58
07 Thermal & Moisture Protection	2.37%	\$2,029.26
Gutters: Missing or Inadequate		\$2,029.26
08 Doors & Windows	8.76%	\$7,492.17
Exterior Steel Door - Beyond expected useful life		\$7,492.17
09 Finishes	24.81%	\$21,223.53
Carpet: Beyond Useful Life		\$3,057.19
Drywall Ceilings: Damaged or Failing		\$4,734.34
Floor Tile: Damaged or Failing		\$804.92
Interior ceilings: Paint Failing		\$870.72
Interior walls: Paint failing		\$555.35
Vinyl Wall Covering: Beyond expected useful life		\$7,126.10
Wall Tile: Damaged or Failing		\$4,074.91
13 Special Construction	10.31%	\$8,824.40
Fire Sprinklers: Missing or Inadequate		\$8,824.40
15 Mechanical	15.64%	\$13,382.06
Bath tub: Replace due to remodel		\$1,790.72
Pipe, domestic water: Beyond expected useful life		\$5,139.29
Pipe, sewer or waste: Beyond expected useful life		\$2,466.32
Sink & vanity: Replace due to remodel		\$1,746.30
Water closet: Replace due to remodel		\$2,239.43
16 Electrical	31.07%	\$26,583.56
Branch Circuits: Beyond Expected Useful Life		\$6,983.15
Fixture: Incandescent fixture beyond expected life		\$9,238.31
Pole mounted fixture: Beyond expected useful life		\$6,576.60
Pole mounted fixture: Missing or inadequate		\$3,785.50
19 FF&E	5.84%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$85,559.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$470.57
Force Protection	9.00%	\$8,512.69
General Conditions	10.00%	\$8,555.90
Total Additional Hard Cost		\$17,539.17

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
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Contingency	10.00%	\$10,309.82
SIOH Conus	6.50%	\$7,371.52
Design	10.00%	\$10,309.82
08 MYr Inflation Fct	9.93%	\$13,017.17
Total Soft Cost		\$41,008.32
Total Project		\$144,106.49

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	0.63%	\$1,023.58
Site Development		\$1,023.58
07 Thermal & Moisture Protection	1.38%	\$2,235.56
Roof Construction		\$2,235.56
08 Doors & Windows	8.91%	\$14,451.57
Exterior Doors		\$6,966.45
Interior Doors		\$7,485.12
09 Finishes	24.52%	\$39,749.92
Ceiling Finishes		\$7,250.70
Floor Finishes		\$10,887.00
Partitions		\$8,138.82
Wall Finishes		\$13,473.40
10 Specialties	0.16%	\$262.89
Fittings		\$262.89
11 Equipment	7.32%	\$11,865.00
Other Equipment		\$11,865.00
13 Special Construction	8.27%	\$13,401.12
Communications & Security		\$6,032.73
Sprinklers		\$7,368.39
15 Mechanical	21.49%	\$34,843.55
Cooling Generating Systems		\$17,808.80
Domestic Water Dist		\$7,119.00
Plumbing Fixtures		\$9,915.75
16 Electrical	18.06%	\$29,283.95
Electrical Service & Distribution		\$18,921.85
Site Lighting		\$10,362.10
19 FF&E	9.25%	\$15,000.00
Interior FF&E allowance		\$15,000.00
Total Raw Cost	100.00%	\$162,117.14

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$891.64
Force Protection	9.00%	\$16,129.84
General Conditions	10.00%	\$16,211.71
Total Additional Hard Cost		\$33,233.20

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,535.03
SIOH Conus	6.50%	\$13,967.55
Design	10.00%	\$19,535.03
08 MYr Inflation Fct	9.93%	\$24,664.92

Total Soft Cost	\$77,702.54
Total Project Cost for Renovation	\$273,052.89

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.64%	\$15,041.43
Parking Lots		\$3,435.20
Site Earthwork		\$11,606.23
03 Concrete	9.80%	\$26,103.00
Floor Construction		\$9,040.00
Slab on Grade		\$8,531.50
Standard Foundations		\$8,531.50
04 Masonry	12.11%	\$32,266.17
Exterior Walls		\$32,266.17
07 Thermal & Moisture Protection	10.04%	\$26,746.18
Roof Construction		\$5,022.81
Roof Coverings		\$21,723.36
08 Doors & Windows	17.12%	\$45,623.75
Exterior Doors		\$6,966.45
Exterior Windows		\$31,640.00
Interior Doors		\$7,017.30
09 Finishes	12.63%	\$33,662.11
Ceiling Finishes		\$5,490.61
Floor Finishes		\$11,915.09
Partitions		\$8,968.18
Wall Finishes		\$7,288.23
11 Equipment	4.45%	\$11,865.00
Other Equipment		\$11,865.00
13 Special Construction	3.85%	\$10,271.93
Communications & Security		\$4,624.07
Sprinklers		\$5,647.85
15 Mechanical	11.51%	\$30,685.15
Cooling Generating Systems		\$13,650.40
Domestic Water Dist		\$7,119.00
Plumbing Fixtures		\$9,915.75
16 Electrical	7.21%	\$19,226.95
Electrical Service & Distribution		\$16,746.60
Site Lighting		\$2,480.35
19 FF&E	5.63%	\$15,000.00
Interior FF&E allowance		\$15,000.00
Total Raw Cost	100.00%	\$266,491.67

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,465.70
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$26,649.17
Total Additional Hard Cost		\$28,114.87

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$14,730.33
SIOH Conus	6.50%	\$20,106.90
Design	10.00%	\$29,460.65
08 MYr Inflation Fct	9.93%	\$35,639.21
Total Soft Cost		\$99,937.09
Total Project Cost for Replacement		\$394,543.63

INSERT BUILDING 446 FLOOR PLAN HERE



Building 0448

Building 448 was constructed in 1941. The 1,004 square foot facility contains a family suite with a full kitchen. The building is functioning as a family suite.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$179,375.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	58.98%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 448 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: This lodging unit contains one bedroom. The hard goods consist of headboard, nightstand, chest of drawers, a couch, an easy chair, end tables, and a dining table with chairs, entertainment armoire, microwave, and lamps. The soft goods consist of curtain toppers and mini-blinds on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation consists of a stone and mortar partial basement and foundation wall around the perimeter of the building with a wood column support. The foundation is in good condition but does exhibit some recent repair work.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This building does not contain a slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The floor is a wood joist system supported by the basement walls and a wood column. The wood joist system is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Wood stud walls support the roof structure. The superstructure is in good condition. The gutters exist only at the front door stoop but are in good condition.
- Recommendation: Install additional gutters and downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are aluminum siding in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units that are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The front entry doors are metal insulated doors in good condition. The doors have keyed locksets.
- Recommendation: Replace the exterior doors.

Roofing**Roof Coverings**

- Analysis: The building has a sloped asphalt shingle roof on wood deck. The shingles were replaced in 2002 and are in good condition.
- Recommendation: No corrective action required.

Interior Construction**Partitions**

- Analysis: The interior partitions are drywall on stud partition and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are hollow core wood in wood frames in good condition.
- Recommendation: No corrective action required.

Interior Finishes**Wall Finishes**

- Analysis: The wall finishes are painted drywall in good condition. In the bathroom, the painted drywall is in fair condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathroom has vinyl composition tile in good condition. The kitchen and dining area have vinyl composition tile in good condition.
- Recommendation: Replace the carpet tiles. Replace the bathroom vinyl composition tile with ceramic tile.

Ceiling Finishes

- Analysis: The living room has acoustical ceiling tile in good condition. The bedroom has acoustical ceiling tile in fair condition. The bathroom, kitchen, and dining area have painted drywall ceilings in good condition.
- Recommendation: Replace the acoustical ceiling tile with a painted drywall ceiling. Paint the drywall ceilings.

Plumbing**Plumbing Fixtures**

- Analysis: This lodging unit has one full bathroom. It contains a water closet and shower/tub combination in good condition. The porcelain lavatory on a 36" wood vanity is in fair condition.

- Recommendation: Replace the lavatory and vanity when the plumbing is replaced.

Domestic Water Distribution

- Analysis: The residential type 50 gallon electric hot water heater is leaking from the base and is in poor condition. The piping is mostly original and in fair condition.
- Recommendation: Replace the water heater. Replace the domestic water system piping.

HVAC

Cooling Generating Systems

- Analysis: A central air system using a gas furnace and a split system air conditioner provides heating and cooling. Both of the systems were installed in 2003 and are in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 208/120 volt, 1600 amp main panel in good condition. The lighting is mostly incandescent with some fluorescent light and is in good condition. The outlets in the rooms are in sufficient quantity. The electrical branch distribution is in good condition.
- Recommendation: Replace the branch circuits. Replace the lighting.

Communications and Security

- Analysis: The fire alarm system consists of hard wired smoke detectors. Other system components were not noted. The system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchen that includes a base and wall cabinets, a refrigerator, stove, sink, and range hood. The cabinets are in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas, numerous trees, and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in fair condition. There are no sidewalks for this building. The walkway to the front door is in fair condition.
- Recommendation: Resurface the access road and parking pad.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.
- Recommendation: Install pole mounted light.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.09%	\$1,023.58
Parking: AC Pavement Damaged or Failing		\$1,023.58
07 Thermal & Moisture Protection	1.75%	\$857.90
Gutters: Missing or Inadequate		\$857.90
08 Doors & Windows	10.20%	\$4,994.78
Exterior Steel Door - Beyond expected useful life		\$4,994.78
09 Finishes	23.10%	\$11,313.88
Carpet: Beyond Useful Life		\$1,190.17
Drywall Ceilings: Damaged or Failing		\$2,418.63
Floor Tile: Damaged or Failing		\$578.53
Interior ceilings: Paint Failing		\$375.35
Interior walls: Paint failing		\$182.68
Vinyl Wall Covering: Beyond expected useful life		\$4,178.90
Wall Tile: Damaged or Failing		\$2,389.62
13 Special Construction	9.21%	\$4,508.40
Fire Sprinklers: Missing or Inadequate		\$4,508.40
15 Mechanical	13.14%	\$6,435.14
Pipe, domestic water: Beyond expected useful life		\$2,619.90
Pipe, sewer or waste: Beyond expected useful life		\$1,259.40
Sink & vanity: Replace due to remodel		\$873.15
Water heater: Beyond expected useful life		\$1,682.69
16 Electrical	30.30%	\$14,841.73
Branch Circuits: Beyond Expected Useful Life		\$3,559.06
Fixture: Incandescent fixture beyond expected life		\$4,706.07
Pole mounted fixture: Beyond expected useful life		\$6,576.60
19 FF&E	10.21%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$48,975.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$269.36
Force Protection	9.00%	\$4,872.77
General Conditions	10.00%	\$4,897.50
Total Additional Hard Cost		\$10,039.63

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$5,901.46
SIOH Conus	6.50%	\$4,219.55

Design	10.00%	\$5,901.46
08 MYr Inflation Fct	9.93%	\$7,451.18
Total Soft Cost		\$23,473.66
Total Project		\$82,488.29

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	0.96%	\$1,023.58
Site Development		\$1,023.58
07 Thermal & Moisture Protection	1.54%	\$1,640.22
Roof Construction		\$1,640.22
08 Doors & Windows	12.69%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	26.68%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.16%	\$175.26
Fittings		\$175.26
11 Equipment	7.43%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	6.41%	\$6,829.81
Communications & Security		\$3,074.55
Sprinklers		\$3,755.26
15 Mechanical	19.50%	\$20,771.66
Cooling Generating Systems		\$9,076.16
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	15.23%	\$16,220.02
Electrical Service & Distribution		\$9,643.42
Site Lighting		\$6,576.60
19 FF&E	9.39%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$106,498.67

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$585.74
Force Protection	9.00%	\$10,596.09
General Conditions	10.00%	\$10,649.87
Total Additional Hard Cost		\$21,831.70

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$12,833.04
SIOH Conus	6.50%	\$9,175.62
Design	10.00%	\$12,833.04
08 MYr Inflation Fct	9.93%	\$16,202.99

Total Soft Cost	\$51,044.68
Total Project Cost for Renovation	\$179,375.05

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 448 FLOOR PLAN HERE



Building 2030

Building 2030 was constructed in 1992. The 42,526 square foot facility contains 70 lodging rooms functioning as 70 family suites.

Significant Assumptions

The replacement cost model is based on 68 family suites.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$3,932,650.00
Replacement Cost	\$9,516,525.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	41.32%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 2030 could be considered

Attributes

01.Number of Units Constructed	70
02.Number of Units Used	70
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	70
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	70
13.Renovated to Standard	0
14.Renovated to Extended Stay	0
15.Renovated to Family Suite	68
16.Delta renovation	-2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: The hard goods consist of headboards, nightstand, sleeper sofa, easy chairs, end tables, and dining table with chairs, entertainment shelf, microwave, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is composed of a concrete grade beam and short concrete foundation wall supporting load-bearing CMU/brick walls. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The first floor is a concrete slab on grade. The second floor is a cast-in-place concrete slab. The first floor walls are load-bearing CMU. The second floor walls are metal stud. There are structural concrete columns spaced along the front of the building to the top of the second floor. The systems are in good condition. The two end walkway balconies have some settlement and severe cracking and spalling and are in poor condition.
- Recommendation: Replace the walkway balconies.

Roof Construction

- Analysis: The sloped structure is wood frame construction with wood decking. Metal stud walls support the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition and drain to an underground drainage system.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are brick veneer in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in good condition.

- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The lobby vestibule entry doors are glazed doors are in good condition. The other access doors are commercial grade metal doors, some with glazing, with metal frames in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The sloped standing seam metal roof on wood deck is in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and furred masonry walls and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The unit entry doors are fire-rated metal doors with keyless lockset. The other doors are solid core wood in metal frames. The closet doors are mirrored sliding units in good condition.
- Recommendation: No corrective action required.

Fittings

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The interior stairs are metal with concrete infill and rubber flooring and are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are textured painted drywall in good condition. One bedroom wall has an accent wall using vinyl wall covering and is in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living and bedroom areas have carpet tile in good condition. The bathrooms, vanity area, and the kitchenette have sheet vinyl in good condition.

- Recommendation: Replace the carpet tiles. Replace the sheet vinyl with ceramic tile.

Ceiling Finishes

- Analysis: The living room, bedroom, bathroom, and vanity area have painted drywall/concrete in good condition. The kitchenette has acoustical ceiling tile in fair condition.
- Recommendation: Replace the acoustical ceiling tile and grid with a painted drywall ceiling. Paint the drywall ceilings.

Conveying

Elevators and Lifts

- Analysis: This building does not have an elevator. It does have a dumbwaiter located in the housekeeping room used to convey linen and supplies. It is in good condition.
- Recommendation: No corrective action required.

Plumbing

Plumbing Fixtures

- Analysis: Each unit has an individual bathroom containing a porcelain lavatory and 48" laminated vanity, water closet, and a tub/shower combination in good condition. A small sink is in the kitchenette.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Part of a bank of 19 staged gas boilers provide hot water to two hot water storage tanks to supply the building with hot water. The system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The mechanical system for the rooms is a two-pipe fan-coil hydronic hot water heating system and chilled water system in good condition. There is fan speed control but no temperature control. An air handling system supplies tempered air to the common areas. The hot water for heating is supplied by a number of 19 staged gas boilers located in the mechanical room. These are in good condition. The chiller is located to the rear of the building and is in good condition. The bathroom ventilation is a rooftop induced draft system in poor condition.
- Recommendation: Replace the fan-coils in the building. Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building contained a sprinkler system in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service comes through a 208/120 volt, 1600 amp main panel. The electrical service is in good condition. The lighting is mostly incandescent with some fluorescent light and is in good condition. The outlets in the units are in sufficient quantity. The electrical branch distribution is in good condition.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke detectors located in each room. The system has an annunciator panel, exit signs, emergency lights, and strobes and is connected to the fire department. The system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchenette that includes a base and wall cabinets, a refrigerator, a two-burner stovetop, single-bowl sink, and range hood. The kitchenette is in fair condition.
- Recommendation: Replace the cabinets.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and some trees and shrubs. The site is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking lots are in fair condition. A section of sidewalk at the front of the building is in fair condition due to settlement and cracking.
- Recommendation: Resurface the access road and parking spaces. Replace the damaged sections of sidewalk.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

House Keeping

Does not exist/undersized.

Renovation Recommendation: Will be included as part of renovation to this building.

Clean and Dirty Linen Room

Does not exist.

Renovation Recommendation: Will be included as part of renovation to this building.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

- **Public Spaces**

Guest Bulk Storage, Gear Wash, Bell Cart, Phones.

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Passenger Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.82%	\$18,845.83
Parking: AC Pavement Damaged or Failing		\$17,912.65
Walks: Concrete Walk Damaged or Failing		\$933.18
03 Concrete	0.10%	\$2,400.07
Concrete Floors: Damaged or Failing		\$2,400.07
09 Finishes	27.58%	\$634,838.30
Acoustical Ceiling & Grid: Beyond expt useful life		\$7,471.52
Carpet: Beyond Useful Life		\$74,933.26
Drywall Ceilings: Damaged or Failing		\$18,310.48
Floor Tile: Damaged or Failing		\$36,196.87
Interior ceilings: Paint Failing		\$27,322.71
Interior walls: Paint failing		\$7,421.71
VCT: Beyond Useful Life		\$2,451.54
Vinyl Wall Covering: Beyond expected useful life		\$235,540.82
Wall Tile: Damaged or Failing		\$225,189.39
11 Equipment	12.03%	\$276,929.10
Unit Kitchen: Beyond Useful Life		\$276,929.10
15 Mechanical	44.26%	\$1,018,951.86
FCU: Beyond expected useful life		\$905,532.46
Restroom exhaust: Missing or inadequate		\$113,419.40
19 FF&E	15.20%	\$350,000.00
Hard and soft goods: Beyond expected useful life		\$350,000.00
Total Raw Cost	100.00%	\$2,301,965.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$12,660.81
Force Protection	9.00%	\$229,034.01
General Conditions	10.00%	\$230,196.50
Total Additional Hard Cost		\$471,891.32

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$277,385.63
SIOH Conus	6.50%	\$198,330.73
Design	10.00%	\$277,385.63
08 MYr Inflation Fct	9.93%	\$350,226.96
Total Soft Cost		\$1,103,328.95
Total Project		\$3,877,185.26

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	57.45%	\$18,919.13
Ceiling Finishes		\$1,315.32
Floor Finishes		\$6,517.84
Partitions		\$1,247.51
Wall Finishes		\$9,838.46
11 Equipment	20.59%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	1.37%	\$452.00
Communications & Security		\$226.00
Sprinklers		\$226.00
15 Mechanical	2.75%	\$904.00
Cooling Generating Systems		\$904.00
16 Electrical	17.84%	\$5,876.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$1,356.00
Total Raw Cost	100.00%	\$32,931.13

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$181.12
Force Protection	9.00%	\$3,276.48
General Conditions	10.00%	\$3,293.11
Total Additional Hard Cost		\$6,750.72

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$3,968.18
SIOH Conus	6.50%	\$2,837.25
Design	10.00%	\$3,968.18
08 MYr Inflation Fct	9.93%	\$5,010.23
Total Soft Cost		\$15,783.85
Total Project Cost for Renovation		\$55,465.69

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.94%	\$253,187.80
Parking Lots		\$64,410.00
Site Earthwork		\$188,777.80
03 Concrete	16.56%	\$1,064,702.77
Floor Construction		\$620,477.17
Slab on Grade		\$139,769.70
Stair Construction		\$24,916.50
Standard Foundations		\$279,539.40
04 Masonry	5.06%	\$325,082.70
Exterior Walls		\$325,082.70
07 Thermal & Moisture Protection	7.90%	\$507,957.36
Roof Construction		\$164,846.05
Roof Coverings		\$343,111.32
08 Doors & Windows	7.19%	\$461,845.69
Exterior Doors		\$11,102.25
Exterior Windows		\$325,440.00
Interior Doors		\$125,303.44
09 Finishes	15.19%	\$976,669.65
Ceiling Finishes		\$153,956.54
Floor Finishes		\$272,769.77
Partitions		\$294,833.20
Wall Finishes		\$255,110.13
10 Specialties	0.06%	\$3,830.14
Fittings		\$3,830.14
11 Equipment	4.18%	\$268,940.00
Other Equipment		\$268,940.00
13 Special Construction	5.24%	\$336,565.44
Communications & Security		\$151,510.35
Sprinklers		\$185,055.08
14 Conveying Systems	3.78%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	18.11%	\$1,164,181.37
Cooling Generating Systems		\$447,263.04
Domestic Water Dist		\$207,468.00
Plumbing Fixtures		\$509,450.33
16 Electrical	7.50%	\$482,183.43
Electrical Service & Distribution		\$479,703.08
Site Lighting		\$2,480.35
19 FF&E	5.29%	\$340,000.00
Interior FF&E allowance		\$340,000.00
Total Raw Cost	100.00%	\$6,427,870.34

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$35,353.29
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$642,787.03
Total Additional Hard Cost		\$678,140.32

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$355,300.53
SIOH Conus	6.50%	\$484,985.23
Design	10.00%	\$710,601.07
08 MYr Inflation Fct	9.93%	\$859,629.92
Total Soft Cost		\$2,410,516.75
Total Project Cost for Replacement		\$9,516,527.41

**INSERT BUILDING 2030 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 2040

Building 2040 is a single-story wood-framed buildings constructed in 1941. It is about 700 square feet in size, and contains one family suite with a full kitchen.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$203,210.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	66.82%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 2040 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. The soft goods consist of: mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The cast in place concrete stem wall is in good condition.
- Recommendation: No corrective action is required.

Slab on Grade

- Analysis: This facility has no slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The wood crawl space has some settlement and is in fair condition.
- Recommendation: Replace the subfloor sheathing.

Roof Construction

- Analysis: The sloped wood trusses have some uneven sheathing, which is in fair condition.
- Recommendation: Replace the roof sheathing.

Exterior Enclosure

Exterior Walls

- Analysis: The aluminum siding is in fair condition.
- Recommendation: No corrective action is required.

Exterior Windows

- Analysis: The aluminum double hung windows with insulated double pane glass are in good condition.
- Recommendation: No corrective action is required.

Exterior Doors

- Analysis: The wood door and aluminum storm doors are in fair condition.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The three tab asphalt shingles are in poor condition. There are no gutters or downspouts.
- Recommendation: Replace the roof covering.

Interior Construction

Partitions

- Analysis: The gypsum board partitions are in good condition.
- Recommendation: No corrective action is required.

Interior Doors

- Analysis: The hollow core wood doors are in fair condition.
- Recommendation: Refinish the interior doors.

Interior Finishes

Wall Finishes

- Analysis: The painted walls are in fair condition.
- Recommendation: Install vinyl wall covering.

Floor Finishes

- Analysis: The carpet in the bedrooms and living room is in fair condition. The VCT in the kitchen and bathroom is in good condition.
- Recommendation: Replace the carpet in bedrooms, install sheet vinyl in the kitchen and install ceramic tile in the bathroom.

Ceiling Finishes

- Analysis: The painted stippled ceiling is in good condition.
- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action is required.

Domestic Water Distribution

- Analysis: The Reliance 40 gallon electric water heater is in fair condition. The waste and supply piping are in poor condition.
- Recommendation: Replace the water heater. Replace the waste and supply piping.

HVAC

Cooling Generating Systems

- Analysis: The weathering propane fired furnace and Goodman cooling condenser are in good condition.
- Recommendation: No corrective action is required.

Fire Protection

Sprinklers

- Analysis: There are no sprinklers.
- Recommendation: No corrective action is required.

Electrical

Electrical Service/Distribution

- Analysis: The Square D load center with 200 amp distribution is in fair condition. The wiring and receptacles are in poor condition.
- Recommendation: Replace the wiring receptacles and 200 amp main service.

Communications and Security

- Analysis: There are no fire notifiers or smoke detectors.
- Recommendation: Install a smoke detectors.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action is required.

Site Preparation

Site Earthwork

- Analysis: There is minor erosion at the building perimeter. The earthwork is in fair condition.
- Recommendation: Regrade and landscape eroded area.

Site Improvements

Parking Lots

- Analysis: The asphalt drive and parking lot are in good condition.
- Recommendation: No corrective action is required.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting does not meet standards.
- Recommendation: Install pole and light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	13.55%	\$6,936.71
Site areas insufficient flow		\$6,936.71
07 Thermal & Moisture Protection	10.18%	\$5,214.51
Asphalt Shingle Roof: Damaged or Failing		\$5,214.51
08 Doors & Windows	15.81%	\$8,097.20
Exterior Wood Doors: Beyond Useful Life		\$4,994.78
Scratched and marred		\$3,102.42
09 Finishes	24.67%	\$12,634.42
Carpet: Damaged or Failing		\$1,420.12
Floor Tile: Damaged or Failing		\$503.08
Interior ceilings: Paint Failing		\$466.69
Sheet Vinyl: Damaged or Failing		\$655.21
Vinyl Wall Covering: Damaged or Failing		\$4,906.91
Wood sub floor: Damaged or failing		\$4,682.41
15 Mechanical	8.56%	\$4,381.43
Pipe, domestic water: Damaged or failing		\$1,821.04
Pipe, sewer or waste: Beyond expected useful life		\$877.70
Water heater: Damaged or failing		\$1,682.69
16 Electrical	17.47%	\$8,947.39
Branch Circuits: Beyond Expected Useful Life		\$2,479.27
Inadequate exterior Lighting		\$3,785.50
Main service: Damaged or failing		\$2,682.62
19 FF&E	9.76%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$51,212.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$281.67
Force Protection	9.00%	\$5,095.34
General Conditions	10.00%	\$5,121.20
Total Additional Hard Cost		\$10,498.20

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$6,171.02
SIOH Conus	6.50%	\$4,412.28
Design	10.00%	\$6,171.02
08 MYr Inflation Fct	9.93%	\$7,791.53
Total Soft Cost		\$24,545.85

Total Project

\$86,256.05

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	5.75%	\$6,936.71
Site Development		\$6,936.71
07 Thermal & Moisture Protection	4.68%	\$5,646.98
Roof Construction		\$1,640.22
Roof Coverings		\$4,006.76
08 Doors & Windows	11.20%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	23.55%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.15%	\$175.26
Fittings		\$175.26
11 Equipment	6.56%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	7.22%	\$8,707.33
Communications & Security		\$3,919.74
Sprinklers		\$4,787.58
15 Mechanical	19.28%	\$23,266.70
Cooling Generating Systems		\$11,571.20
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	13.33%	\$16,079.90
Electrical Service & Distribution		\$12,294.40
Site Lighting		\$3,785.50
19 FF&E	8.29%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$120,651.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$663.58
Force Protection	9.00%	\$12,004.17
General Conditions	10.00%	\$12,065.10
Total Additional Hard Cost		\$24,732.85

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$14,538.39
SIOH Conus	6.50%	\$10,394.95
Design	10.00%	\$14,538.39

08 MYr Inflation Fct	9.93%	\$18,356.16
Total Soft Cost		\$57,827.88
Total Project Cost for Renovation		\$203,211.73

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 2040 FLOOR PLAN HERE



Building 2041

Building 2041 is a single-story wood-framed buildings constructed in 1941. It is about 800 square feet in size, and contains one family suite with a full kitchen.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$203,210.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	66.82%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 2041 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	1
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. The soft goods consist of: mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The cast in place concrete stem wall is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: This facility has no slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The wood crawl space has some settlement and is in fair condition.
- Recommendation: Replace the subfloor sheathing.

Roof Construction

- Analysis: The sloped wood trusses have some uneven sheathing, which is in fair condition.
- Recommendation: Replace the roof sheathing.

Exterior Enclosure

Exterior Walls

- Analysis: The aluminum siding is in fair condition.
- Recommendation: No corrective action is required.

Exterior Windows

- Analysis: The aluminum double hung windows with insulated double pane glass are in good condition.
- Recommendation: No corrective action is required.

Exterior Doors

- Analysis: The wood door and aluminum storm doors are in fair condition.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The three tab asphalt shingles are in poor condition. There are no gutters or downspouts.
- Recommendation: Replace the roof covering.

Interior Construction

Partitions

- Analysis: The gypsum board partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The hollow core wood doors are in fair condition.
- Recommendation: Refinish the interior doors.

Interior Finishes

Wall Finishes

- Analysis: The painted walls are in good condition.
- Recommendation: Install vinyl wall covering and retouch paint where it is needed.

Floor Finishes

- Analysis: The carpet in the bedrooms and living room is in fair condition. The VCT in the kitchen and bathroom is in fair condition.
- Recommendation: Replace the carpet in the bedrooms. Install sheet vinyl in the kitchen and install ceramic tile in the bathroom.

Ceiling Finishes

- Analysis: The painted stippled ceiling is in good condition.
- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The Reliance 40 gallon electric water heater is in fair condition. The waste and supply piping are in poor condition.
- Recommendation: Replace the water heater. Replace the waste and supply piping.

HVAC

Cooling Generating Systems

- Analysis: The weathering propane fired furnace and Goodman cooling condenser are in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: There are no sprinklers.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The Square D load center with 200 amp distribution is in fair condition. The wiring and receptacles are in poor condition.
- Recommendation: Replace the wiring, receptacles and 200 amp main service.

Communications and Security

- Analysis: There are no fire notifiers or smoke detectors.
- Recommendation: Install smoke detectors.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action is required.

Site Preparation

Site Earthwork

- Analysis: There is minor erosion at the building perimeter. The earthwork is in fair condition.
- Recommendation: Regrade and landscape eroded area.

Site Improvements

Parking Lots

- Analysis: The asphalt drive and parking lot are in good condition.
- Recommendation: No corrective action is required.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting does not meet standards.
- Recommendation: Install pole and light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	12.70%	\$6,936.71
Site areas insufficient flow		\$6,936.71
07 Thermal & Moisture Protection	9.54%	\$5,214.51
Asphalt Shingle Roof: Damaged or Failing		\$5,214.51
08 Doors & Windows	14.82%	\$8,097.20
Exterior Wood Doors: Beyond Useful Life		\$4,994.78
Scratched and marred		\$3,102.42
09 Finishes	28.06%	\$15,333.30
Carpet: Damaged or Failing		\$1,686.42
Floor Tile: Damaged or Failing		\$628.86
Interior walls: Paint failing		\$800.04
Sheet Vinyl: Damaged or Failing		\$817.78
Vinyl Wall Covering: Damaged or Failing		\$6,440.32
Wood sub floor: Damaged or failing		\$4,959.88
15 Mechanical	7.66%	\$4,185.93
Pipe, domestic water: Damaged or failing		\$2,503.24
Water heater: Damaged or failing		\$1,682.69
16 Electrical	18.07%	\$9,871.68
Branch Circuits: Beyond Expected Useful Life		\$3,403.56
Inadequate exterior Lighting		\$3,785.50
Main service: Damaged or failing		\$2,682.62
19 FF&E	9.15%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$54,639.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$300.51
Force Protection	9.00%	\$5,436.31
General Conditions	10.00%	\$5,463.90
Total Additional Hard Cost		\$11,200.72

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$6,583.97
SIOH Conus	6.50%	\$4,707.54
Design	10.00%	\$6,583.97
08 MYr Inflation Fct	9.93%	\$8,312.92
Total Soft Cost		\$26,188.40

Total Project

\$92,028.13

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	5.75%	\$6,936.71
Site Development		\$6,936.71
07 Thermal & Moisture Protection	4.68%	\$5,646.98
Roof Construction		\$1,640.22
Roof Coverings		\$4,006.76
08 Doors & Windows	11.20%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	23.55%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.15%	\$175.26
Fittings		\$175.26
11 Equipment	6.56%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	7.22%	\$8,707.33
Communications & Security		\$3,919.74
Sprinklers		\$4,787.58
15 Mechanical	19.28%	\$23,266.70
Cooling Generating Systems		\$11,571.20
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	13.33%	\$16,079.90
Electrical Service & Distribution		\$12,294.40
Site Lighting		\$3,785.50
19 FF&E	8.29%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$120,651.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$663.58
Force Protection	9.00%	\$12,004.17
General Conditions	10.00%	\$12,065.10
Total Additional Hard Cost		\$24,732.85

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$14,538.39
SIOH Conus	6.50%	\$10,394.95
Design	10.00%	\$14,538.39

08 MYr Inflation Fct	9.93%	\$18,356.16
Total Soft Cost		\$57,827.88
Total Project Cost for Renovation		\$203,211.73

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 2041 FLOOR PLAN HERE



Building 2042

Building 2042 is a single-story wood-framed buildings constructed in 1941. It is about 850 square feet in size, and contains one family suite with a full kitchen.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$203,210.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	66.82%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 2042 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. The soft goods consist of: mattress, pillows, sheets, blankets, drapes and shower curtain. The FF&E is in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The cast in place concrete stem wall is in good condition.
- Recommendation: No corrective action is required.

Slab on Grade

- Analysis: This facility has no slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The wood crawl space has some settlement and is in fair condition.
- Recommendation: Replace the subfloor sheathing.

Roof Construction

- Analysis: The sloped wood trusses have some uneven sheathing, which is in fair condition.
- Recommendation: Replace the roof sheathing.

Exterior Enclosure

Exterior Walls

- Analysis: The aluminum siding is in fair condition.
- Recommendation: No corrective action is required.

Exterior Windows

- Analysis: The aluminum double hung windows with insulated double pane glass are in good condition.
- Recommendation: No corrective action is required.

Exterior Doors

- Analysis: The wood door and aluminum storm doors are in fair condition.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The three tab asphalt shingles are in poor condition. There are no gutters or downspouts.
- Recommendation: Replace the roof covering.

Interior Construction

Partitions

- Analysis: The gypsum board partitions are in good condition.
- Recommendation: No corrective action is required.

Interior Doors

- Analysis: The hollow core wood doors are in fair condition.
- Recommendation: Refinish the interior doors.

Interior Finishes

Wall Finishes

- Analysis: The painted walls are in good condition.
- Recommendation: Install vinyl wall covering.

Floor Finishes

- Analysis: The carpet in the bedrooms and living room is in fair condition. The VCT in the kitchen and bathroom is in good condition.
- Recommendation: Replace the carpet in bedrooms. Install sheet vinyl in the kitchen and install ceramic tile in the bathroom.

Ceiling Finishes

- Analysis: The painted stippled ceiling is in good condition.
- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action is required.

Domestic Water Distribution

- Analysis: The 30 gallon A O Smith electric water heater is in fair condition. The waste and supply piping are in poor condition.
- Recommendation: Replace the water heater. Replace the waste and supply piping.

HVAC

Cooling Generating Systems

- Analysis: The weathering propane fired furnace and Goodman cooling condenser are in good condition.
- Recommendation: No corrective action is required.

Fire Protection

Sprinklers

- Analysis: There are no sprinklers.
- Recommendation: No corrective action is required.

Electrical

Electrical Service/Distribution

- Analysis: The Square D load center with 200 amp distribution is in fair condition. The wiring and receptacles are in poor condition.
- Recommendation: Replace the wiring, receptacles and 200 amp main service.

Communications and Security

- Analysis: There are no fire notifiers or smoke detectors.
- Recommendation: Install smoke detectors.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action is required.

Site Preparation

Site Earthwork

- Analysis: There is minor erosion at the building perimeter. The earthwork is in fair condition.
- Recommendation: Regrade and landscape eroded area.

Site Improvements

Parking Lots

- Analysis: The asphalt drive and parking lot are in good condition.
- Recommendation: No corrective action is required.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting does not meet standards.
- Recommendation: Install pole and light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	13.80%	\$6,936.71
Site areas insufficient flow		\$6,936.71
07 Thermal & Moisture Protection	10.37%	\$5,214.51
Asphalt Shingle Roof: Damaged or Failing		\$5,214.51
08 Doors & Windows	13.64%	\$6,856.23
Exterior Wood Doors: Beyond Useful Life		\$4,994.78
Scratched and marred		\$1,861.45
09 Finishes	24.62%	\$12,372.07
Floor Tile: Damaged or Failing		\$754.61
Interior ceilings: Paint Failing		\$516.69
Sheet Vinyl: Damaged or Failing		\$817.78
Vinyl Wall Covering: Damaged or Failing		\$4,906.91
Wood sub floor: Damaged or failing		\$5,376.08
15 Mechanical	9.29%	\$4,668.91
Pipe, domestic water: Damaged or failing		\$2,015.48
Pipe, sewer or waste: Beyond expected useful life		\$970.74
Water heater: Damaged or failing		\$1,682.69
16 Electrical	18.33%	\$9,213.92
Branch Circuits: Beyond Expected Useful Life		\$2,745.80
Inadequate exterior Lighting		\$3,785.50
Main service: Damaged or failing		\$2,682.62
19 FF&E	9.95%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$50,262.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$276.44
Force Protection	9.00%	\$5,000.82
General Conditions	10.00%	\$5,026.20
Total Additional Hard Cost		\$10,303.46

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$6,056.55
SIOH Conus	6.50%	\$4,330.43
Design	10.00%	\$6,056.55
08 MYr Inflation Fct	9.93%	\$7,646.99
Total Soft Cost		\$24,090.51

Total Project

\$84,655.97

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	5.75%	\$6,936.71
Site Development		\$6,936.71
07 Thermal & Moisture Protection	4.68%	\$5,646.98
Roof Construction		\$1,640.22
Roof Coverings		\$4,006.76
08 Doors & Windows	11.20%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	23.55%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.15%	\$175.26
Fittings		\$175.26
11 Equipment	6.56%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	7.22%	\$8,707.33
Communications & Security		\$3,919.74
Sprinklers		\$4,787.58
15 Mechanical	19.28%	\$23,266.70
Cooling Generating Systems		\$11,571.20
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	13.33%	\$16,079.90
Electrical Service & Distribution		\$12,294.40
Site Lighting		\$3,785.50
19 FF&E	8.29%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$120,651.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$663.58
Force Protection	9.00%	\$12,004.17
General Conditions	10.00%	\$12,065.10
Total Additional Hard Cost		\$24,732.85

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$14,538.39
SIOH Conus	6.50%	\$10,394.95
Design	10.00%	\$14,538.39

08 MYr Inflation Fct	9.93%	\$18,356.16
Total Soft Cost		\$57,827.88
Total Project Cost for Renovation		\$203,211.73

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 2042 FLOOR PLAN HERE



Building 2043

Building 2043 is a single-story wood-framed buildings constructed in 1941. It is about 700 square feet in size, and contains one family suite with a full kitchen.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$203,210.00
Replacement Cost	\$304,110.00
Renovation to Replacement Cost Ratio	66.82%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 2043 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. The soft goods consist of: mattress, pillows, sheets, blankets, drapes and shower curtain. The FF&E is in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The cast in place concrete stem wall is in good condition.
- Recommendation: No corrective action is required.

Slab on Grade

- Analysis: This facility has no slab on grade.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The wood crawl space has some settlement and is in fair condition.
- Recommendation: Replace the subfloor sheathing.

Roof Construction

- Analysis: The sloped wood trusses have some uneven sheathing, which is in fair condition.
- Recommendation: Replace the roof sheathing.

Exterior Enclosure

Exterior Walls

- Analysis: The aluminum siding is in fair condition.
- Recommendation: No corrective action is required.

Exterior Windows

- Analysis: The aluminum double hung windows with insulated double pane glass are in good condition.
- Recommendation: No corrective action is required.

Exterior Doors

- Analysis: The wood door and aluminum storm doors are in fair condition.
- Recommendation: Replace the exterior doors.

Roofing

Roof Coverings

- Analysis: The three tab asphalt shingles are in poor condition. There are no gutters or downspouts.
- Recommendation: Replace the roof covering.

Interior Construction

Partitions

- Analysis: The gypsum board partitions are in good condition.
- Recommendation: No corrective action is required.

Interior Doors

- Analysis: The hollow core wood doors are in fair condition.
- Recommendation: Refinish the interior doors.

Interior Finishes

Wall Finishes

- Analysis: The painted walls are in good condition.
- Recommendation: Install vinyl wall covering.

Floor Finishes

- Analysis: The carpet in the bedrooms and living room is in fair condition. The VCT in the kitchen and bathroom is in good condition.
- Recommendation: Replace the carpet in bedrooms. Install sheet vinyl in the kitchen and install ceramic tile in the bathroom.

Ceiling Finishes

- Analysis: The painted stippled ceiling is in good condition.
- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action is required.

Domestic Water Distribution

- Analysis: The Reliance 40 gallon electric water heater is in fair condition. The waste and supply piping are in poor condition.
- Recommendation: Replace the water heater. Replace the waste and supply piping.

HVAC

Cooling Generating Systems

- Analysis: The weathering propane fired furnace and Goodman cooling condenser are in good condition.
- Recommendation: No corrective action is required.

Fire Protection

Sprinklers

- Analysis: There are no sprinklers.
- Recommendation: No corrective action is required.

Electrical

Electrical Service/Distribution

- Analysis: The Square D load center with 200 amp distribution is in fair condition. The wiring and receptacles are in poor condition.
- Recommendation: Replace the wiring, receptacles and 200 amp main service.

Communications and Security

- Analysis: There are no fire notifiers or smoke detectors.
- Recommendation: Install smoke detectors.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action is required.

Site Preparation

Site Earthwork

- Analysis: There is minor erosion at the building perimeter. The earthwork is in fair condition.
- Recommendation: Regrade and landscape eroded area.

Site Improvements

Parking Lots

- Analysis: The asphalt drive and parking lot are in good condition.
- Recommendation: No corrective action is required.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting does not meet standards.
- Recommendation: Install pole and light.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	16.08%	\$6,936.71
Site areas insufficient flow		\$6,936.71
07 Thermal & Moisture Protection	12.09%	\$5,214.51
Asphalt Shingle Roof: Damaged or Failing		\$5,214.51
08 Doors & Windows	17.33%	\$7,476.71
Exterior Wood Doors: Beyond Useful Life		\$4,994.78
Scratched and marred		\$2,481.93
09 Finishes	25.25%	\$10,895.13
Carpet: Damaged or Failing		\$1,109.12
Floor Tile: Damaged or Failing		\$314.42
Interior ceilings: Paint Failing		\$373.35
Vinyl Wall Covering: Damaged or Failing		\$5,213.59
Wood sub floor: Damaged or failing		\$3,884.65
15 Mechanical	8.90%	\$3,839.74
Pipe, domestic water: Damaged or failing		\$1,458.12
Pipe, sewer or waste: Beyond expected useful life		\$698.93
Water heater: Damaged or failing		\$1,682.69
16 Electrical	8.77%	\$3,785.50
Inadequate exterior Lighting		\$3,785.50
19 FF&E	11.59%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$43,148.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$237.31
Force Protection	9.00%	\$4,293.01
General Conditions	10.00%	\$4,314.80
Total Additional Hard Cost		\$8,845.12

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$5,199.31
SIOH Conus	6.50%	\$3,717.51
Design	10.00%	\$5,199.31
08 MYr Inflation Fct	9.93%	\$6,564.65
Total Soft Cost		\$20,680.78
Total Project		\$72,673.91

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	5.75%	\$6,936.71
Site Development		\$6,936.71
07 Thermal & Moisture Protection	4.68%	\$5,646.98
Roof Construction		\$1,640.22
Roof Coverings		\$4,006.76
08 Doors & Windows	11.20%	\$13,515.93
Exterior Doors		\$6,966.45
Interior Doors		\$6,549.48
09 Finishes	23.55%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.15%	\$175.26
Fittings		\$175.26
11 Equipment	6.56%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	7.22%	\$8,707.33
Communications & Security		\$3,919.74
Sprinklers		\$4,787.58
15 Mechanical	19.28%	\$23,266.70
Cooling Generating Systems		\$11,571.20
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	13.33%	\$16,079.90
Electrical Service & Distribution		\$12,294.40
Site Lighting		\$3,785.50
19 FF&E	8.29%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$120,651.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$663.58
Force Protection	9.00%	\$12,004.17
General Conditions	10.00%	\$12,065.10
Total Additional Hard Cost		\$24,732.85

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$14,538.39
SIOH Conus	6.50%	\$10,394.95
Design	10.00%	\$14,538.39

08 MYr Inflation Fct	9.93%	\$18,356.16
Total Soft Cost		\$57,827.88
Total Project Cost for Renovation		\$203,211.73

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.35%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	9.30%	\$19,108.30
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Standard Foundations		\$6,164.15
04 Masonry	13.96%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.54%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	19.56%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	12.07%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.85%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.61%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.50%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.40%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.87%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$205,408.99

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,129.75
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$20,540.90
Total Additional Hard Cost		\$21,670.65

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,353.98
SIOH Conus	6.50%	\$15,498.19
Design	10.00%	\$22,707.96
08 MYr Inflation Fct	9.93%	\$27,470.33
Total Soft Cost		\$77,030.46
Total Project Cost for Replacement		\$304,110.10

INSERT BUILDING 2043 FLOOR PLAN HERE



Building 2051

Building 2051, constructed in 1941, has one DVQ suite with a full kitchen at 1,200 square feet. The building has vinyl siding and a sloped shingled roof and is one story without a basement.

Significant Assumptions

The replacement and renovation cost models are based on 1 extended stay room and 1 family suite.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Leonard Wood, Missouri.

Cost Analysis

Renovation Cost	\$211,045.00
Replacement Cost	\$316,405.00
Renovation to Replacement Cost Ratio	66.70%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building 2051 is not recommended.

Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	1
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	1
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The FF&E consists of: Hard goods-single bed, headboard,nightstand, dresser, chest, armoire, sleeper sofa, table and chairs, table lamp, combination desk/bookcase/chest of drawers, clock radio, telephone, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, can opener, wall mirror, coffee pot, toaster, dishes pots and pans, and silverware. The soft goods consist of: Mattress, box springs, pillows, sheets, blankets, draperies, towels, robe, slippers and shower curtain. The FF&E is in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The cast in place concrete stem wall is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: There is no slab on grade.
- Recommendation: No correction action required.

Superstructure

Floor Construction

- Analysis: The wood floor with crawl space is in fair condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped wood trusses are in good condition. The asphalt shingles are in good condition. The gutters are in fair condition
- Recommendation: Replace the gutter system.

Exterior Enclosure

Exterior Walls

- Analysis: The aluminum siding is in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The double-pane aluminum windows are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The wood doors and a metal clad door are in good condition. They do not have electronic key locks installed.

- Recommendation: Install electronic lock sets.

Roofing

Roof Coverings

- Analysis: The three-tab asphalt shingles were installed in 2002 and are in good condition. The gutters are in fair condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board partition walls are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The wood interior doors are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: There are no stairs in this facility.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The kitchen and bath have ceramic tile wainscot in good condition. The living and dining rooms have vinyl wall covering. The finishes are in fair condition.
- Recommendation: Replace the vinyl wall covering in bedroom, dining room, living room, kitchen and bathrooms.

Floor Finishes

- Analysis: The dining room has a rug over wood flooring, the bedrooms have carpet in fair condition. The bathrooms have vinyl tile and the kitchen has sheet vinyl. They are in good condition.
- Recommendation: Replace the carpet, floor tile and sheet vinyl.

Ceiling Finishes

- Analysis: The painted stippled ceiling is in fair condition.
- Recommendation: Repaint the ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Access to the mechanical room was not available.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The new Goodman forced air furnace and Goodman condensing unit is in like new condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: No fire sprinklers are installed.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The ITE 30 amp disconnect is in good condition.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The alarm system is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site grading is in good condition. The sidewalk is in poor condition.
- Recommendation: Replace the concrete sidewalk.

Site Improvements

Parking Lots

- Analysis: The parking lot and driveway are in poor condition.
- Recommendation: Replace the asphalt driveway and parking lot.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in fair condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	27.63%	\$8,914.61
Parking: AC Pavement Damaged or Failing		\$6,675.14
Walks: Concrete Walk Damaged or Failing		\$2,239.47
07 Thermal & Moisture Protection	6.08%	\$1,960.27
Downspouts: Damaged or Failing		\$310.47
Gutters: Damaged or Failing		\$1,649.80
08 Doors & Windows	7.88%	\$2,542.50
Lockset - Missing or Inadequate		\$2,542.50
09 Finishes	42.91%	\$13,842.81
Carpet: Beyond Useful Life		\$2,416.95
Floor Tile: Damaged or Failing		\$1,257.69
Interior ceilings: Paint Failing		\$673.37
Sheet Vinyl: Damaged or Failing		\$601.02
Vinyl Wall Covering: Damaged or Failing		\$8,893.78
19 FF&E	15.50%	\$5,000.00
Hard and soft goods: Beyond expected useful life		\$5,000.00
Total Raw Cost	100.00%	\$32,260.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$177.43
Force Protection	9.00%	\$3,209.71
General Conditions	10.00%	\$3,226.00
Total Additional Hard Cost		\$6,613.14

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$3,887.31
SIOH Conus	6.50%	\$2,779.43
Design	10.00%	\$3,887.31
08 MYr Inflation Fct	9.93%	\$4,908.12
Total Soft Cost		\$15,462.18
Total Project		\$54,335.32

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
02 Site Work	7.12%	\$8,915.70
Site Development		\$8,915.70
07 Thermal & Moisture Protection	1.31%	\$1,640.22
Roof Construction		\$1,640.22
08 Doors & Windows	5.23%	\$6,549.48
Interior Doors		\$6,549.48
09 Finishes	22.67%	\$28,412.19
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
10 Specialties	0.14%	\$175.26
Fittings		\$175.26
11 Equipment	6.31%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	10.67%	\$13,367.11
Communications & Security		\$6,017.42
Sprinklers		\$7,349.69
15 Mechanical	23.51%	\$29,459.10
Cooling Generating Systems		\$17,763.60
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	15.06%	\$18,873.83
Electrical Service & Distribution		\$18,873.83
19 FF&E	7.98%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$125,302.89

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$689.17
Force Protection	9.00%	\$12,467.01
General Conditions	10.00%	\$12,530.29
Total Additional Hard Cost		\$25,686.47

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$15,098.94
SIOH Conus	6.50%	\$10,795.74
Design	10.00%	\$15,098.94
08 MYr Inflation Fct	9.93%	\$19,063.91
Total Soft Cost		\$60,057.52

Total Project Cost for Renovation

\$211,046.87

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	5.14%	\$10,986.71
Parking Lots		\$2,576.40
Site Earthwork		\$8,410.31
03 Concrete	12.83%	\$27,413.80
Floor Construction		\$6,780.00
Slab on Grade		\$6,164.15
Stair Construction		\$8,305.50
Standard Foundations		\$6,164.15
04 Masonry	13.42%	\$28,681.04
Exterior Walls		\$28,681.04
07 Thermal & Moisture Protection	9.17%	\$19,587.40
Roof Construction		\$3,671.71
Roof Coverings		\$15,915.69
08 Doors & Windows	18.80%	\$40,168.11
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
09 Finishes	11.60%	\$24,785.20
Ceiling Finishes		\$4,120.71
Floor Finishes		\$8,549.17
Partitions		\$6,634.91
Wall Finishes		\$5,480.41
11 Equipment	3.70%	\$7,910.00
Other Equipment		\$7,910.00
13 Special Construction	3.47%	\$7,421.64
Communications & Security		\$3,340.97
Sprinklers		\$4,080.67
15 Mechanical	10.09%	\$21,558.14
Cooling Generating Systems		\$9,862.64
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
16 Electrical	7.11%	\$15,202.46
Electrical Service & Distribution		\$12,722.11
Site Lighting		\$2,480.35
19 FF&E	4.68%	\$10,000.00
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$213,714.49

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,175.43
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$21,371.45
Total Additional Hard Cost		\$22,546.88

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$11,813.07
SIOH Conus	6.50%	\$16,124.84
Design	10.00%	\$23,626.14
08 MYr Inflation Fct	9.93%	\$28,581.06
Total Soft Cost		\$80,145.11
Total Project Cost for Replacement		\$316,406.47

INSERT BUILDING 2051 FLOOR PLAN HERE



Fort Leonard Wood, Mo, Building 3211

Building 3211

Building 3211 was constructed in 1989. The 43,242 square foot facility contains 87 lodging units operating as 81 extended stay rooms and 6 family suites.

Significant Assumptions

The replacement and renovation cost models are based on 89 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$3,105,830.00
Replacement Cost	\$8,999,215.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	34.51%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3211 could be considered

Attributes

01.Number of Units Constructed	87
02.Number of Units Used	87
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	81
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	6
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	81
12.Operating as Family Suite	6
13.Renovated to Standard	0
14.Renovated to Extended Stay	89
15.Renovated to Family Suite	0
16.Delta renovation	2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: The hard goods consist of headboard, nightstand, recliner chair, end tables, table with chairs, computer desk with chair, entertainment armoire, microwave, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is composed of a concrete column footings supporting a steel frame. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The first floor is a concrete slab on grade. The second and third floors are concrete slabs. The floor support is a steel frame with CMU infill. All systems are in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is steel frame construction. A steel frame supports the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition but there is damage to the lower sections of the downspouts.
- Recommendation: Replace damaged sections of downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are brick veneer in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in fair condition.
- Recommendation: Replace the windows.

Exterior Doors

- Analysis: The lobby/vestibule entry doors are glazed doors in good condition. The other access doors are commercial grade metal doors, some with glazing, with metal frames in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The sloped standing seam metal roof is in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and furred masonry walls and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The unit entry doors are fire-rated metal doors with keyless lockset. The other doors are solid core wood doors in metal frames. The closet doors are mirrored sliding units in good condition. The unit entry doors are in fair condition. The other doors are in good condition.
- Recommendation: Replace the unit entry doors.

Fittings

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The interior stairs are metal with concrete infill and rubber flooring and are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition. One bedroom wall has an accent wall using vinyl wall covering and is in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathrooms and kitchenette have a mixture of flooring materials. The original flooring is sheet vinyl. As floors are damaged, the sheet vinyl is replaced with vinyl composition tile. The surveyed sheet vinyl and vinyl composition tile is in good condition.

- Recommendation: Replace the carpet tiles. Replace the sheet vinyl and vinyl composition tile with ceramic tile.

Ceiling Finishes

- Analysis: The units have painted drywall ceilings in fair condition.
- Recommendation: Paint the drywall ceilings. Replace the acoustical ceiling tile.

Conveying

Elevators and Lifts

- Analysis: This building has an elevator in good condition.
- Recommendation: No corrective action required.

Plumbing

Plumbing Fixtures

- Analysis: Each unit has an individual bathroom containing a porcelain lavatory and laminated vanity, water closet, and a tub/shower combination in good condition. A small sink is in the kitchenette.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Two gas boilers with an hot water tanks produce hot water. One boiler is 250 gallons; the other is 225 gallons. They are in good condition. The piping is original and is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The mechanical system for the rooms is a two-pipe fan-coil hydronic hot water heating system and chilled water system in good condition. There is an on/off fan control but no temperature control. The hot water for heating is supplied by a three digital boiler systems in good condition installed in 2002. Chilled water comes from one of four Trane chillers in good condition. The boilers are located in a common support building, Building 3215, and the chillers are located adjacent to this support building. The bathroom ventilation is a switched system in poor condition.
- Recommendation: Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service in this building is supplied by several sub panels: a 200 amp and two 400 amp panels in good condition. An overall main electrical service was not located. The support Building 3215 contained a 480/277 volt 600 amp panel that controlled the HVAC mechanical systems.

- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke and heat combination detectors located in each room. The system has an annunciator panel, exit signs, emergency lights, and strobes and is connected to the fire department. The system is in good condition.

- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchenette that includes a laminated base and wall cabinets, a refrigerator, a two-burner stovetop, single-bowl sink, and range hood with fire suppression. The kitchenette is in fair condition.

- Recommendation: Replace the kitchenettes.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and a few trees and shrubs. There are areas of poor drainage and standing water at the building's foundation and between the buildings. The site is in poor condition.

- Recommendation: Regrade the area around the building to provide better drainage.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in poor condition. The sidewalks are in good condition.

- Recommendation: Resurface the access road and parking spaces.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.

- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilet

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Clean and Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Undersized

Renovation Recommendation: Will be included as part of renovation to this building.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

- **Family Guest Suite**

- **Public Spaces**

Study Rooms

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Bell Cart, Telephones

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	7.52%	\$126,077.05
Parking: AC Pavement Damaged or Failing		\$13,818.33
Site areas insufficient flow		\$112,258.72
07 Thermal & Moisture Protection	0.01%	\$248.37
Downspouts: Damaged or Failing		\$248.37
09 Finishes	34.41%	\$576,634.19
Acoustical Ceiling & Grid: Beyond expt useful life		\$7,504.20
Carpet: Beyond Useful Life		\$71,761.53
Floor Tile: Damaged or Failing		\$98,036.93
Interior ceilings: Paint Failing		\$23,131.83
Interior walls: Paint failing		\$10,873.22
Vinyl Wall Covering: Beyond expected useful life		\$184,571.27
Wall Tile: Damaged or Failing		\$180,755.21
11 Equipment	20.54%	\$344,183.31
Unit Kitchen: Beyond Useful Life		\$344,183.31
13 Special Construction	11.55%	\$193,569.87
Fire Sprinklers: Missing or Inadequate		\$193,569.87
19 FF&E	25.96%	\$435,000.00
Hard and soft goods: Beyond expected useful life		\$435,000.00
Total Raw Cost	100.00%	\$1,675,713.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,216.42
Force Protection	9.00%	\$166,725.06
General Conditions	10.00%	\$167,571.30
Total Additional Hard Cost		\$343,512.79

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$201,922.58
SIOH Conus	6.50%	\$144,374.64
Design	10.00%	\$201,922.58
08 MYr Inflation Fct	9.93%	\$254,947.35
Total Soft Cost		\$803,167.15
Total Project		\$2,822,392.93

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.06%	\$13,560.00
Interior Doors		\$13,560.00
09 Finishes	56.49%	\$95,055.26
Ceiling Finishes		\$6,359.64
Floor Finishes		\$16,649.42
Partitions		\$57,916.68
Wall Finishes		\$14,129.52
11 Equipment	3.31%	\$5,575.99
Commercial Equipment		\$3,418.25
Other Equipment		\$2,157.74
13 Special Construction	9.89%	\$16,649.82
Communications & Security		\$4,545.26
Sprinklers		\$12,104.56
15 Mechanical	15.06%	\$25,334.60
Plumbing Fixtures		\$25,334.60
16 Electrical	7.19%	\$12,104.56
Electrical Service & Distribution		\$12,104.56
Total Raw Cost	100.00%	\$168,280.23

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$925.54
Force Protection	9.00%	\$16,743.04
General Conditions	10.00%	\$16,828.02
Total Additional Hard Cost		\$34,496.61

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$20,277.68
SIOH Conus	6.50%	\$14,498.54
Design	10.00%	\$20,277.68
08 MYr Inflation Fct	9.93%	\$25,602.59
Total Soft Cost		\$80,656.50
Total Project Cost for Renovation		\$283,433.34

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.07%	\$186,490.12
Parking Lots		\$84,162.40
Site Earthwork		\$102,327.72
03 Concrete	17.91%	\$1,088,558.56
Floor Construction		\$735,795.16
Slab on Grade		\$75,732.60
Stair Construction		\$49,833.00
Standard Foundations		\$227,197.80
04 Masonry	4.17%	\$253,482.58
Exterior Walls		\$253,482.58
07 Thermal & Moisture Protection	5.22%	\$317,458.53
Roof Construction		\$131,160.40
Roof Coverings		\$186,298.13
08 Doors & Windows	9.10%	\$552,948.55
Exterior Doors		\$15,238.05
Exterior Windows		\$420,360.00
Interior Doors		\$117,350.50
09 Finishes	13.81%	\$839,696.26
Ceiling Finishes		\$122,899.84
Floor Finishes		\$312,594.20
Partitions		\$229,363.24
Wall Finishes		\$174,838.98
10 Specialties	0.06%	\$3,830.14
Fittings		\$3,830.14
11 Equipment	5.79%	\$351,995.00
Other Equipment		\$351,995.00
13 Special Construction	4.50%	\$273,546.15
Communications & Security		\$123,141.21
Sprinklers		\$150,404.94
14 Conveying Systems	3.99%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	18.50%	\$1,124,798.61
Cooling Generating Systems		\$363,516.48
Domestic Water Dist		\$181,026.00
Plumbing Fixtures		\$580,256.13
16 Electrical	6.55%	\$397,926.11
Electrical Service & Distribution		\$392,965.41
Site Lighting		\$4,960.70
19 FF&E	7.32%	\$445,000.00
Interior FF&E allowance		\$445,000.00
Total Raw Cost	100.00%	\$6,078,454.60

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$33,431.50
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$607,845.46
Total Additional Hard Cost		\$641,276.96

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$335,986.58
SIOH Conus	6.50%	\$458,621.68
Design	10.00%	\$671,973.16
08 MYr Inflation Fct	9.93%	\$812,900.88
Total Soft Cost		\$2,279,482.29
Total Project Cost for Replacement		\$8,999,213.85

**INSERT BUILDING 3211 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Fort Leonard Wood, MO, Building 3212

Building 3212

Building 3212 was constructed in 1989. The 43,242 square foot facility contains 87 lodging units operating as 81 extended stay rooms and 6 family suites.

Significant Assumptions

The replacement and renovation cost models are based on 89 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$3,085,595.00
Replacement Cost	\$8,999,215.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	34.29%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3212 could be considered

Attributes

01.Number of Units Constructed	86
02.Number of Units Used	86
03.Back of House Function	Yes
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	80
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	6
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	80
12.Operating as Family Suite	6
13.Renovated to Standard	0
14.Renovated to Extended Stay	89
15.Renovated to Family Suite	0
16.Delta renovation	3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: The hard goods consist of headboard, nightstand, recliner chair, end tables, table with chairs, computer desk with chair, entertainment armoire, microwave, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is composed of a concrete column footings supporting a steel frame. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The first floor is a concrete slab on grade. The second and third floors are concrete slabs. The floor support is a steel frame with CMU infill. The systems are in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is steel frame construction. A steel frame supports the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition but there is damage to the lower sections of the downspouts.
- Recommendation: Replace the damaged sections of downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are brick veneer in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in fair condition.
- Recommendation: Replace the windows.

Exterior Doors

- Analysis: The lobby/vestibule entry doors are glazed doors in good condition. The other access doors are commercial grade metal doors, some with glazing, with metal frames in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The sloped standing seam metal roof is in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and furred masonry walls and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The unit entry doors are fire-rated metal doors with keyless lockset. The other doors are solid core wood doors in metal frames. The closet doors are mirrored sliding units in good condition. The unit entry doors are in fair condition. The other doors are in good condition.
- Recommendation: Replace the unit entry doors.

Fittings

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The interior stairs are metal with concrete infill and rubber flooring and are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition. One of the bedrooms has an accent wall using vinyl wall covering and is in good condition.
- Recommendation: Install vinyl wall coverings where required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathrooms and kitchenette have a mixture of flooring materials. The original flooring is sheet vinyl. As floors are damaged, the sheet vinyl is replaced with vinyl composition tile. The surveyed sheet vinyl and vinyl composition tile is in good condition.

- Recommendation: Replace the carpet tiles. Replace the sheet vinyl and vinyl composition tile with ceramic tile.

Ceiling Finishes

- Analysis: The units have painted drywall ceilings in good condition.
- Recommendation: Paint the drywall ceilings. Replace the acoustical ceiling tile.

Conveying

Elevators and Lifts

- Analysis: This building has an elevator in good condition.
- Recommendation: No corrective action required.

Plumbing

Plumbing Fixtures

- Analysis: Each unit has an individual bathroom containing a porcelain lavatory and laminated vanity, water closet, and a tub/shower combination in good condition. A small sink is in the kitchenette.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Two gas boilers with an hot water tanks produce hot water. One boiler is 250 gallons; the other is 225 gallons. Both are in good condition. The piping is original and is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The mechanical system for the rooms is a two-pipe fan-coil hydronic hot water heating system and chilled water system in good condition. There is an on/off fan control but no temperature control. The hot water for heating is supplied by a three digital boiler systems in good condition installed in 2002. Chilled water comes from one of four Trane chillers in good condition. The boilers are located in a common support building, Building 3215, and the chillers are located adjacent to this support building. The bathroom ventilation is a switched system in poor condition.
- Recommendation: Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service in this building is supplied by several sub panels: a 200 amp and two 400 amp panels in good condition. An overall main electrical service was not located. The support Building 3215 contained a 480/277 volt 600 amp panel that controlled the HVAC mechanical systems.

- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke and heat combination detectors located in each room. The system has an annunciator panel, exit signs, emergency lights, and strobes and is connected to the fire department. The system is in good condition.

- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchenette that includes a laminated base and wall cabinets, a refrigerator, a two-burner stovetop, single-bowl sink, and range hood with fire suppression. The kitchenette is in fair condition. One living unit adjacent to the lounge has been permanently converted to a breakfast bar and contains wood base cabinets in good condition.

- Recommendation: Replace the kitchenettes.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and a few trees and shrubs. There are areas of poor drainage and standing water at the building's foundation and between the buildings. The site is in poor condition.

- Recommendation: Regrade the area around the building to provide better drainage.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in poor condition. The sidewalks are in good condition.

- Recommendation: Resurface the access road and parking spaces.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.

- Recommendation: No corrective action required.

Major Functional Criteria

- Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilet

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Clean and Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Undersized

Renovation Recommendation: Will be included as part of renovation to this building.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

- **Family Guest Suite**

- **Public Spaces**

Study Rooms

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Bell Cart, Telephones

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	7.58%	\$126,077.05
Parking: AC Pavement Damaged or Failing		\$13,818.33
Site areas insufficient flow		\$112,258.72
07 Thermal & Moisture Protection	0.01%	\$248.37
Downspouts: Damaged or Failing		\$248.37
09 Finishes	34.48%	\$573,578.61
Acoustical Ceiling & Grid: Beyond expt useful life		\$7,504.20
Carpet: Beyond Useful Life		\$71,105.80
Floor Tile: Damaged or Failing		\$97,722.51
Interior ceilings: Paint Failing		\$23,148.49
Interior walls: Paint failing		\$10,825.21
Vinyl Wall Covering: Beyond expected useful life		\$184,592.38
Wall Tile: Damaged or Failing		\$178,680.02
11 Equipment	20.45%	\$340,227.18
Unit Kitchen: Beyond Useful Life		\$340,227.18
13 Special Construction	11.63%	\$193,569.87
Fire Sprinklers: Missing or Inadequate		\$193,569.87
19 FF&E	25.85%	\$430,000.00
Hard and soft goods: Beyond expected useful life		\$430,000.00
Total Raw Cost	100.00%	\$1,663,701.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,150.36
Force Protection	9.00%	\$165,529.93
General Conditions	10.00%	\$166,370.10
Total Additional Hard Cost		\$341,050.39

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$200,475.14
SIOH Conus	6.50%	\$143,339.72
Design	10.00%	\$200,475.14
08 MYr Inflation Fct	9.93%	\$253,119.81
Total Soft Cost		\$797,409.81
Total Project		\$2,802,161.20

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.06%	\$13,560.00
Interior Doors		\$13,560.00
09 Finishes	56.49%	\$95,055.26
Ceiling Finishes		\$6,359.64
Floor Finishes		\$16,649.42
Partitions		\$57,916.68
Wall Finishes		\$14,129.52
11 Equipment	3.31%	\$5,575.99
Commercial Equipment		\$3,418.25
Other Equipment		\$2,157.74
13 Special Construction	9.89%	\$16,649.82
Communications & Security		\$4,545.26
Sprinklers		\$12,104.56
15 Mechanical	15.06%	\$25,334.60
Plumbing Fixtures		\$25,334.60
16 Electrical	7.19%	\$12,104.56
Electrical Service & Distribution		\$12,104.56
Total Raw Cost	100.00%	\$168,280.23

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$925.54
Force Protection	9.00%	\$16,743.04
General Conditions	10.00%	\$16,828.02
Total Additional Hard Cost		\$34,496.61

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$20,277.68
SIOH Conus	6.50%	\$14,498.54
Design	10.00%	\$20,277.68
08 MYr Inflation Fct	9.93%	\$25,602.59
Total Soft Cost		\$80,656.50
Total Project Cost for Renovation		\$283,433.34

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.07%	\$186,490.12
Parking Lots		\$84,162.40
Site Earthwork		\$102,327.72
03 Concrete	17.91%	\$1,088,558.56
Floor Construction		\$735,795.16
Slab on Grade		\$75,732.60
Stair Construction		\$49,833.00
Standard Foundations		\$227,197.80
04 Masonry	4.17%	\$253,482.58
Exterior Walls		\$253,482.58
07 Thermal & Moisture Protection	5.22%	\$317,458.53
Roof Construction		\$131,160.40
Roof Coverings		\$186,298.13
08 Doors & Windows	9.10%	\$552,948.55
Exterior Doors		\$15,238.05
Exterior Windows		\$420,360.00
Interior Doors		\$117,350.50
09 Finishes	13.81%	\$839,696.26
Ceiling Finishes		\$122,899.84
Floor Finishes		\$312,594.20
Partitions		\$229,363.24
Wall Finishes		\$174,838.98
10 Specialties	0.06%	\$3,830.14
Fittings		\$3,830.14
11 Equipment	5.79%	\$351,995.00
Other Equipment		\$351,995.00
13 Special Construction	4.50%	\$273,546.15
Communications & Security		\$123,141.21
Sprinklers		\$150,404.94
14 Conveying Systems	3.99%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	18.50%	\$1,124,798.61
Cooling Generating Systems		\$363,516.48
Domestic Water Dist		\$181,026.00
Plumbing Fixtures		\$580,256.13
16 Electrical	6.55%	\$397,926.11
Electrical Service & Distribution		\$392,965.41
Site Lighting		\$4,960.70
19 FF&E	7.32%	\$445,000.00
Interior FF&E allowance		\$445,000.00
Total Raw Cost	100.00%	\$6,078,454.60

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$33,431.50
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$607,845.46
Total Additional Hard Cost		\$641,276.96

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$335,986.58
SIOH Conus	6.50%	\$458,621.68
Design	10.00%	\$671,973.16
08 MYr Inflation Fct	9.93%	\$812,900.88
Total Soft Cost		\$2,279,482.29
Total Project Cost for Replacement		\$8,999,213.85

**INSERT BUILDING 3212 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Fort Leonard Wood, MO., Building 3213

Building 3213

Building 3213 was constructed in 1989. The 43,242 square foot facility contains 87 lodging units operating as 81 extended stay rooms and 6 family suites.

Significant Assumptions

The replacement and renovation cost models are based on 89 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$3,105,830.00
Replacement Cost	\$8,999,215.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	34.51%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3213 could be considered

Attributes

01.Number of Units Constructed	87
02.Number of Units Used	87
03.Back of House Function	Yes
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	81
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	6
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	81
12.Operating as Family Suite	6
13.Renovated to Standard	0
14.Renovated to Extended Stay	89
15.Renovated to Family Suite	0
16.Delta renovation	2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: The hard goods consist of headboard, nightstand, recliner chair, end tables, table with chairs, computer desk with chair, entertainment armoire, microwave, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is composed of a concrete column footings supporting a steel frame. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The first floor is a concrete slab on grade. The second and third floors are concrete slabs. The floor support is a steel frame with CMU infill. The systems are in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is steel frame construction. A steel frame supports the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition but there is damage to the lower sections of the downspouts.
- Recommendation: Replace the damaged sections of downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are brick veneer in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in fair condition.
- Recommendation: Replace the windows.

Exterior Doors

- Analysis: The lobby vestibule entry doors are glazed doors in good condition. The other access doors are commercial grade metal doors, some with glazing, with metal frames in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The sloped standing seam metal roof is in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and furred masonry walls and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The unit entry doors are fire-rated metal doors with keyless lockset. The other doors are solid core wood doors in metal frames. The closet doors are mirrored sliding units in good condition. The unit entry doors are in fair condition. The other doors are in good condition.
- Recommendation: Replace the unit entry doors.

Fittings

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The interior stairs are metal with concrete infill and rubber flooring and are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition. One bedroom has an accent wall using vinyl wall covering and is in good condition.
- Recommendation: Install vinyl wall coverings where they are required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathrooms and kitchenette have a mixture of flooring materials. The original flooring is sheet vinyl. As floors are damaged, the sheet vinyl is replaced with vinyl composition tile. The surveyed sheet vinyl and vinyl composition tile is in good condition.

- Recommendation: Replace the carpet tiles. Replace the sheet vinyl and vinyl composition tile with ceramic tile.

Ceiling Finishes

- Analysis: The units have painted drywall ceilings in good condition.
- Recommendation: Paint the drywall ceilings. Replace the acoustical ceiling tile.

Conveying

Elevators and Lifts

- Analysis: This building has an elevator in good condition.
- Recommendation: No corrective action required.

Plumbing

Plumbing Fixtures

- Analysis: Each unit has an individual bathroom containing a porcelain lavatory and laminated vanity, water closet, and a tub/shower combination in good condition. There is a small sink in the kitchenette.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Two gas boilers with an hot water tanks produce hot water. One boiler is 250 gallons; the other is 225 gallons. They are in good condition. The piping is original and is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The mechanical system for the rooms is a two-pipe fan-coil hydronic hot water heating system and chilled water system in good condition. There is an on/off fan control but no temperature control. The hot water for heating is supplied by a three digital boiler systems in good condition installed in 2002. Chilled water comes from one of four Trane chillers in good condition. The boilers are located in a common support building, Building 3215, and the chillers are located adjacent to this support building. The bathroom ventilation is a switched system in poor condition.
- Recommendation: Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service in this building is supplied by several sub panels: a 200 amp and two 400 amp panels in good condition. An overall main electrical service was not located. The support Building 3215 contained a 480/277 volt 600 amp panel that controlled the HVAC mechanical systems.

- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke and heat combination detectors located in each room. The system has an annunciator panel, exit signs, emergency lights, and strobes and is connected to the fire department. The system is in good condition.

- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchenette that includes a laminated base and wall cabinets, a refrigerator, a two-burner stovetop, single-bowl sink, and range hood with fire suppression. The kitchenette is in fair condition.

- Recommendation: Replace the kitchenettes.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and a few trees and shrubs. There are areas of poor drainage and standing water at the building's foundation and between the buildings. The site is in poor condition.

- Recommendation: Regrade the area around the building to provide better drainage.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in poor condition. The sidewalks are in good condition.

- Recommendation: Resurface the access road and parking spaces.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.

- Recommendation: No corrective action required.

Major Functional Criteria

- Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilet

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Clean and Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Undersized

Renovation Recommendation: Will be included as part of renovation to this building.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

- **Family Guest Suite**

- **Public Spaces**

Study Rooms

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Bell Cart, Telephones

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	7.52%	\$126,077.05
Parking: AC Pavement Damaged or Failing		\$13,818.33
Site areas insufficient flow		\$112,258.72
07 Thermal & Moisture Protection	0.01%	\$248.37
Downspouts: Damaged or Failing		\$248.37
09 Finishes	34.41%	\$576,634.19
Acoustical Ceiling & Grid: Beyond expt useful life		\$7,504.20
Carpet: Beyond Useful Life		\$71,761.53
Floor Tile: Damaged or Failing		\$98,036.93
Interior ceilings: Paint Failing		\$23,131.83
Interior walls: Paint failing		\$10,873.22
Vinyl Wall Covering: Beyond expected useful life		\$184,571.27
Wall Tile: Damaged or Failing		\$180,755.21
11 Equipment	20.54%	\$344,183.31
Unit Kitchen: Beyond Useful Life		\$344,183.31
13 Special Construction	11.55%	\$193,569.87
Fire Sprinklers: Missing or Inadequate		\$193,569.87
19 FF&E	25.96%	\$435,000.00
Hard and soft goods: Beyond expected useful life		\$435,000.00
Total Raw Cost	100.00%	\$1,675,713.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,216.42
Force Protection	9.00%	\$166,725.06
General Conditions	10.00%	\$167,571.30
Total Additional Hard Cost		\$343,512.79

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$201,922.58
SIOH Conus	6.50%	\$144,374.64
Design	10.00%	\$201,922.58
08 MYr Inflation Fct	9.93%	\$254,947.35
Total Soft Cost		\$803,167.15
Total Project		\$2,822,392.93

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.06%	\$13,560.00
Interior Doors		\$13,560.00
09 Finishes	56.49%	\$95,055.26
Ceiling Finishes		\$6,359.64
Floor Finishes		\$16,649.42
Partitions		\$57,916.68
Wall Finishes		\$14,129.52
11 Equipment	3.31%	\$5,575.99
Commercial Equipment		\$3,418.25
Other Equipment		\$2,157.74
13 Special Construction	9.89%	\$16,649.82
Communications & Security		\$4,545.26
Sprinklers		\$12,104.56
15 Mechanical	15.06%	\$25,334.60
Plumbing Fixtures		\$25,334.60
16 Electrical	7.19%	\$12,104.56
Electrical Service & Distribution		\$12,104.56
Total Raw Cost	100.00%	\$168,280.23

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$925.54
Force Protection	9.00%	\$16,743.04
General Conditions	10.00%	\$16,828.02
Total Additional Hard Cost		\$34,496.61

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$20,277.68
SIOH Conus	6.50%	\$14,498.54
Design	10.00%	\$20,277.68
08 MYr Inflation Fct	9.93%	\$25,602.59
Total Soft Cost		\$80,656.50
Total Project Cost for Renovation		\$283,433.34

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.07%	\$186,490.12
Parking Lots		\$84,162.40
Site Earthwork		\$102,327.72
03 Concrete	17.91%	\$1,088,558.56
Floor Construction		\$735,795.16
Slab on Grade		\$75,732.60
Stair Construction		\$49,833.00
Standard Foundations		\$227,197.80
04 Masonry	4.17%	\$253,482.58
Exterior Walls		\$253,482.58
07 Thermal & Moisture Protection	5.22%	\$317,458.53
Roof Construction		\$131,160.40
Roof Coverings		\$186,298.13
08 Doors & Windows	9.10%	\$552,948.55
Exterior Doors		\$15,238.05
Exterior Windows		\$420,360.00
Interior Doors		\$117,350.50
09 Finishes	13.81%	\$839,696.26
Ceiling Finishes		\$122,899.84
Floor Finishes		\$312,594.20
Partitions		\$229,363.24
Wall Finishes		\$174,838.98
10 Specialties	0.06%	\$3,830.14
Fittings		\$3,830.14
11 Equipment	5.79%	\$351,995.00
Other Equipment		\$351,995.00
13 Special Construction	4.50%	\$273,546.15
Communications & Security		\$123,141.21
Sprinklers		\$150,404.94
14 Conveying Systems	3.99%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	18.50%	\$1,124,798.61
Cooling Generating Systems		\$363,516.48
Domestic Water Dist		\$181,026.00
Plumbing Fixtures		\$580,256.13
16 Electrical	6.55%	\$397,926.11
Electrical Service & Distribution		\$392,965.41
Site Lighting		\$4,960.70
19 FF&E	7.32%	\$445,000.00
Interior FF&E allowance		\$445,000.00
Total Raw Cost	100.00%	\$6,078,454.60

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$33,431.50
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$607,845.46
Total Additional Hard Cost		\$641,276.96

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$335,986.58
SIOH Conus	6.50%	\$458,621.68
Design	10.00%	\$671,973.16
08 MYr Inflation Fct	9.93%	\$812,900.88
Total Soft Cost		\$2,279,482.29
Total Project Cost for Replacement		\$8,999,213.85

**INSERT BUILDING 3213 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**

Building 3214



Fort Leonard Wood, MO, Building 3214

Building 3214 was constructed in 1989. The 43,242 square foot facility contains 87 lodging units operating as 81 extended stay rooms and 6 family suites.

Significant Assumptions

The replacement and renovation cost models are based on 89 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$3,105,830.00
Replacement Cost	\$8,999,215.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	34.51%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3214 could be considered

Attributes

01.Number of Units Constructed	87
02.Number of Units Used	87
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	81
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	6
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	81
12.Operating as Family Suite	6
13.Renovated to Standard	0
14.Renovated to Extended Stay	89
15.Renovated to Family Suite	0
16.Delta renovation	2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: Guest Rooms: The hard goods consist of headboard, nightstand, recliner chair, end tables, table with chairs, computer desk with chair, entertainment armoire, microwave, and lamps. The soft goods consist of curtains on the windows, TV, mattress and box springs, and bed coverings. They are in good condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is composed of a concrete column footings supporting a steel frame. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The first floor is a concrete slab on grade. The second and third floors are concrete slabs. The floor support is a steel frame with CMU infill. The systems are in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The sloped structure is steel frame construction. A steel frame supports the roof structure. The superstructure is in good condition. The aluminum gutters and downspouts are in good condition but there is damage to the lower sections of the downspouts.
- Recommendation: Replace the damaged sections of downspouts.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls are brick veneer in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: The windows are double-glazed, aluminum-framed, single-hung units in fair condition.
- Recommendation: Replace the windows.

Exterior Doors

- Analysis: The lobby vestibule entry doors are glazed doors in good condition. The other access doors are commercial grade metal doors, some with glazing, with metal frames in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The sloped standing seam metal roof in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are drywall on stud partitions and furred masonry walls and are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The unit entry doors are fire-rated metal doors with keyless lockset. The other doors are solid core wood doors in metal frames. The closet doors are mirrored sliding units in good condition. The unit entry doors are in fair condition. The other doors are in good condition.
- Recommendation: Replace the unit entry doors.

Fittings

- Analysis: There are no toilet partitions in this building. The bathroom accessories are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The interior stairs are metal with concrete infill and rubber flooring and are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The wall finishes are painted drywall in good condition. One bedroom wall has an accent wall using vinyl wall covering and is in good condition.
- Recommendation: Install vinyl wall coverings where it is required. Install full height ceramic wall tile in the bathroom. Paint the remaining surfaces.

Floor Finishes

- Analysis: The living/bedroom areas have carpet tile in fair condition. The bathrooms and kitchenette have a mixture of flooring materials. The original flooring is sheet vinyl. As floors are damaged, the sheet vinyl is replaced with vinyl composition tile. The surveyed sheet vinyl and vinyl composition tile is in good condition.

- Recommendation: Replace carpet tiles. Replace the sheet vinyl and vinyl composition tile with ceramic tile.

Ceiling Finishes

- Analysis: The units have painted drywall ceilings in fair condition.
- Recommendation: Paint the drywall ceilings. Replace the acoustic ceiling tile.

Conveying

Elevators and Lifts

- Analysis: This building has an elevator in good condition.
- Recommendation: No corrective action required.

Plumbing

Plumbing Fixtures

- Analysis: Each unit has an individual bathroom containing a porcelain lavatory and laminated vanity, water closet, and a tub/shower combination in good condition. A small sink is in the kitchenette.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: Two gas boilers with an hot water tanks produce hot water. One boiler is 250 gallons; the other is 225 gallons. They are in good condition. The piping is original and is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The mechanical system for the rooms is a two-pipe fan-coil hydronic hot water heating system and chilled water system in good condition. There is an on/off fan control but no temperature control. The hot water for heating is supplied by a three digital boiler systems in good condition installed in 2002. Chilled water comes from one of four Trane chillers in good condition. The boilers are located in a common support building, Building 3215, and the chillers are located adjacent to this support building. The bathroom ventilation is a switched system in poor condition.
- Recommendation: Replace the bathroom exhaust system.

Fire Protection

Sprinklers

- Analysis: This building does not contain a sprinkler system.
- Recommendation: Install a new sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The electrical service in this building is supplied by several sub panels: a 200 amp and two 400 amp panels in good condition. An overall main electrical service was not located. The support Building 3215 contained a 480/277 volt 600 amp panel that controlled the HVAC mechanical systems.

- Recommendation: No corrective action required.

Communications and Security

- Analysis: The fire alarm system consists of hard-wired smoke and heat combination detectors located in each room. The system has an annunciator panel, exit signs, emergency lights, and strobes and is connected to the fire department. The system is in good condition.

- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: This unit has a kitchenette that includes a laminated base and wall cabinets, a refrigerator, a two-burner stovetop, single-bowl sink, and range hood with fire suppression. The kitchenette is in fair condition.

- Recommendation: Replace the kitchenettes.

Site Preparation

Site Earthwork

- Analysis: The site consists of grass covered yard areas and a few trees and shrubs. There are areas of poor drainage and standing water at the building's foundation and between the buildings. The site is in poor condition.

- Recommendation: Regrade the area around the building to provide better drainage.

Site Improvements

Parking Lots

- Analysis: The asphalt access road and parking spaces are in poor condition. The sidewalks are in good condition.

- Recommendation: Resurface the access road and parking spaces.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting is in good condition.

- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilet

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Clean and Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Undersized

Renovation Recommendation: Will be included as part of renovation to this building.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is. This is a two story building and it is felt this deficiency is not critical to the support of the building.

- **Family Guest Suite**

- **Public Spaces**

Study Rooms

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Bell Cart, Telephones

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

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Parking: AC Pavement Damaged or Failing		\$13,818.33
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Interior walls: Paint failing		\$10,873.22
Vinyl Wall Covering: Beyond expected useful life		\$184,571.27
Wall Tile: Damaged or Failing		\$180,755.21
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Unit Kitchen: Beyond Useful Life		\$344,183.31
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Additional Hard Cost (Template: Army Lodging Renovation)

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Total Additional Hard Cost		\$343,512.79

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Floor Finishes		\$16,649.42
Partitions		\$57,916.68
Wall Finishes		\$14,129.52
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Commercial Equipment		\$3,418.25
Other Equipment		\$2,157.74
13 Special Construction	9.89%	\$16,649.82
Communications & Security		\$4,545.26
Sprinklers		\$12,104.56
15 Mechanical	15.06%	\$25,334.60
Plumbing Fixtures		\$25,334.60
16 Electrical	7.19%	\$12,104.56
Electrical Service & Distribution		\$12,104.56
Total Raw Cost	100.00%	\$168,280.23

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Total Additional Hard Cost		\$34,496.61

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Total Soft Cost		\$80,656.50
Total Project Cost for Renovation		\$283,433.34

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

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Site Earthwork		\$102,327.72
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Floor Construction		\$735,795.16
Slab on Grade		\$75,732.60
Stair Construction		\$49,833.00
Standard Foundations		\$227,197.80
04 Masonry	4.17%	\$253,482.58
Exterior Walls		\$253,482.58
07 Thermal & Moisture Protection	5.22%	\$317,458.53
Roof Construction		\$131,160.40
Roof Coverings		\$186,298.13
08 Doors & Windows	9.10%	\$552,948.55
Exterior Doors		\$15,238.05
Exterior Windows		\$420,360.00
Interior Doors		\$117,350.50
09 Finishes	13.81%	\$839,696.26
Ceiling Finishes		\$122,899.84
Floor Finishes		\$312,594.20
Partitions		\$229,363.24
Wall Finishes		\$174,838.98
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Fittings		\$3,830.14
11 Equipment	5.79%	\$351,995.00
Other Equipment		\$351,995.00
13 Special Construction	4.50%	\$273,546.15
Communications & Security		\$123,141.21
Sprinklers		\$150,404.94
14 Conveying Systems	3.99%	\$242,724.00
Elevators and Lifts		\$242,724.00
15 Mechanical	18.50%	\$1,124,798.61
Cooling Generating Systems		\$363,516.48
Domestic Water Dist		\$181,026.00
Plumbing Fixtures		\$580,256.13
16 Electrical	6.55%	\$397,926.11
Electrical Service & Distribution		\$392,965.41
Site Lighting		\$4,960.70
19 FF&E	7.32%	\$445,000.00
Interior FF&E allowance		\$445,000.00
Total Raw Cost	100.00%	\$6,078,454.60

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$33,431.50
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$607,845.46
Total Additional Hard Cost		\$641,276.96

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$335,986.58
SIOH Conus	6.50%	\$458,621.68
Design	10.00%	\$671,973.16
08 MYr Inflation Fct	9.93%	\$812,900.88
Total Soft Cost		\$2,279,482.29
Total Project Cost for Replacement		\$8,999,213.85

**INSERT BUILDING 3214 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**

Building 3231



Frontal view of Building 3231, Fort Leonard Wood, MO.

Building 3231, 230 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3231 could be considered

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3231 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3232

Building 3232, 230 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3232 could be considered

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3232 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3233

Building 3233, 230 Gate Street, Ft. Leonard Wood, MO. 65473 is a three-story brick building built in 1999. The 31923 SF facility consists of 48 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 96 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 48 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,784,485.00
Replacement Cost	\$4,621,260.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	38.61%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3233 could be considered.

Attributes

01.Number of Units Constructed	96
02.Number of Units Used	96
03.Back of House Function	No
04.Single Room w/o FullKitchen	96
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	96
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	48
15.Renovated to Family Suite	0
16.Delta renovation	-48

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: No corrective action required.

Fittings

- Analysis: All fittings are in good condition
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.
- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 13,160 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**
All of the back of the house functions are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.
- **Extended Stay Guest Room**
Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.
Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.
- **Public Spaces**
All of the Public Spaces are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$2,271.58
Parking: AC Pavement Damaged or Failing		\$2,271.58
09 Finishes	41.69%	\$352,941.33
Acoustical Ceiling Tile: Beyond expect useful life		\$9,687.53
Carpet: Beyond Useful Life		\$40,156.95
Floor Tile: Damaged or Failing		\$34,000.50
Interior ceilings: Paint Failing		\$14,829.40
Interior walls: Paint failing		\$9,600.48
Railings: Paint Failing		\$955.98
Vinyl Wall Covering: Beyond expected useful life		\$32,201.61
Vinyl Wall Covering: Damaged or Failing		\$169,288.46
Wood door: Finish failing or damaged		\$42,220.42
10 Specialties	1.35%	\$11,441.25
Sign: Damaged or Failing		\$11,441.25
19 FF&E	56.69%	\$480,000.00
Hard and soft goods: Beyond expected useful life		\$480,000.00
Total Raw Cost	100.00%	\$846,654.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,656.60
Force Protection	9.00%	\$84,237.84
General Conditions	10.00%	\$84,665.40
Total Additional Hard Cost		\$173,559.84

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$102,021.38
SIOH Conus	6.50%	\$72,945.29
Design	10.00%	\$102,021.38
08 MYr Inflation Fct	9.93%	\$128,812.15
Total Soft Cost		\$405,800.20
Total Project		\$1,426,014.04

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$188,423.16
Ceiling Finishes		\$63,135.36
Floor Finishes		\$65,088.00
Partitions		\$26,645.58
Wall Finishes		\$33,554.22
16 Electrical	11.47%	\$24,408.00
Lighting & Branch Wiring		\$24,408.00
Total Raw Cost	100.00%	\$212,831.16

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,170.57
Force Protection	9.00%	\$21,175.64
General Conditions	10.00%	\$21,283.12
Total Additional Hard Cost		\$43,629.32

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$25,646.05
SIOH Conus	6.50%	\$18,336.92
Design	10.00%	\$25,646.05
08 MYr Inflation Fct	9.93%	\$32,380.69
Total Soft Cost		\$102,009.71
Total Project Cost for Renovation		\$358,470.19

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.23%	\$100,876.51
Parking Lots		\$45,516.40
Site Earthwork		\$55,360.11
03 Concrete	18.31%	\$571,603.74
Floor Construction		\$399,527.34
Slab on Grade		\$40,945.55
Stair Construction		\$8,305.50
Standard Foundations		\$122,825.35
04 Masonry	4.96%	\$154,950.16
Exterior Walls		\$154,950.16
07 Thermal & Moisture Protection	5.41%	\$168,765.91
Roof Construction		\$67,682.94
Roof Coverings		\$101,082.98
08 Doors & Windows	9.79%	\$305,480.81
Exterior Doors		\$15,238.05
Exterior Windows		\$235,040.00
Interior Doors		\$55,202.76
09 Finishes	13.77%	\$429,923.32
Ceiling Finishes		\$66,763.30
Floor Finishes		\$164,468.79
Partitions		\$112,259.88
Wall Finishes		\$86,431.35
10 Specialties	0.05%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.08%	\$189,840.00
Other Equipment		\$189,840.00
13 Special Construction	4.74%	\$147,881.72
Communications & Security		\$66,571.34
Sprinklers		\$81,310.38
15 Mechanical	18.98%	\$592,359.56
Cooling Generating Systems		\$196,520.56
Domestic Water Dist		\$97,632.00
Plumbing Fixtures		\$298,207.00
16 Electrical	6.98%	\$218,012.60
Electrical Service & Distribution		\$215,532.25
Site Lighting		\$2,480.35
19 FF&E	7.69%	\$240,000.00
Interior FF&E allowance		\$240,000.00
Total Raw Cost	100.00%	\$3,121,398.38

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$17,167.69

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$312,139.84
Total Additional Hard Cost		\$329,307.53

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$172,535.30
SIOH Conus	6.50%	\$235,510.68
Design	10.00%	\$345,070.59
08 MYr Inflation Fct	9.93%	\$417,439.57
Total Soft Cost		\$1,170,556.14
Total Project Cost for Replacement		\$4,621,262.05

**INSERT BUILDING 3233 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3234

Building 3234, 230 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3234 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3230 which serves as a support facility for secondary facilities of Buildings 3231-3234.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3234 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3241

Building 3241, 240 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3241 could be considered

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3241 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3242

Building 3242, 240 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3242 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3242 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3243

Building 3243, 240 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3243 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3243 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3244

Building 3244, 240 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,337,410.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.22%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3244 could be considered

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 308 parking spots servicing 8 buildings. The proportional share is 10,000 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3240 which serves as a support facility for secondary facilities of Buildings 3241-3244.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.27%	\$1,726.21
Parking: AC Pavement Damaged or Failing		\$1,726.21
09 Finishes	41.58%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.74%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$634,423.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,489.33
Force Protection	9.00%	\$63,121.92
General Conditions	10.00%	\$63,442.30
Total Additional Hard Cost		\$130,053.54

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,447.65
SIOH Conus	6.50%	\$54,660.07
Design	10.00%	\$76,447.65
08 MYr Inflation Fct	9.93%	\$96,522.77
Total Soft Cost		\$304,078.15
Total Project		\$1,068,554.69

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3244 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3251

Building 3251, 250 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,338,525.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.25%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3251 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 205 parking spots servicing 8 buildings. The proportional share is 13,840 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.38%	\$2,389.67
Parking: AC Pavement Damaged or Failing		\$2,389.67
09 Finishes	41.53%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.69%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$635,087.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,492.98
Force Protection	9.00%	\$63,187.98
General Conditions	10.00%	\$63,508.70
Total Additional Hard Cost		\$130,189.66

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,527.67
SIOH Conus	6.50%	\$54,717.28
Design	10.00%	\$76,527.67
08 MYr Inflation Fct	9.93%	\$96,623.79
Total Soft Cost		\$304,396.41
Total Project		\$1,069,673.07

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3251 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3252

Building 3252, 250 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,338,525.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.25%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3252 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 205 parking spots servicing 8 buildings. The proportional share is 13,840 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.38%	\$2,389.67
Parking: AC Pavement Damaged or Failing		\$2,389.67
09 Finishes	41.53%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.69%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$635,087.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,492.98
Force Protection	9.00%	\$63,187.98
General Conditions	10.00%	\$63,508.70
Total Additional Hard Cost		\$130,189.66

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,527.67
SIOH Conus	6.50%	\$54,717.28
Design	10.00%	\$76,527.67
08 MYr Inflation Fct	9.93%	\$96,623.79
Total Soft Cost		\$304,396.41
Total Project		\$1,069,673.07

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3252 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3253

Building 3253, 250 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,338,525.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.25%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3253 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 205 parking spots servicing 8 buildings. The proportional share is 13,840 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

Major Functional Criteria Analysis

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.38%	\$2,389.67
Parking: AC Pavement Damaged or Failing		\$2,389.67
09 Finishes	41.53%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.69%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$635,087.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,492.98
Force Protection	9.00%	\$63,187.98
General Conditions	10.00%	\$63,508.70
Total Additional Hard Cost		\$130,189.66

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,527.67
SIOH Conus	6.50%	\$54,717.28
Design	10.00%	\$76,527.67
08 MYr Inflation Fct	9.93%	\$96,623.79
Total Soft Cost		\$304,396.41
Total Project		\$1,069,673.07

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3253 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 3254

Building 3254, 250 Gate Street, Ft. Leonard Wood, MO. 65473, is a three-story brick building built in 1999. The 22,822 SF facility consists of 36 two-person modules with 2 private bedrooms and a shared bathroom and kitchen with refrigerator, microwave and sink. The facility functions as 72 extended stay rooms for students.

Significant Assumptions

The replacement cost model is based on 36 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,338,525.00
Replacement Cost	\$3,593,005.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.25%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 3254 could be considered.

Attributes

01.Number of Units Constructed	72
02.Number of Units Used	72
03.Back of House Function	No
04.Single Room w/o FullKitchen	72
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	72
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	36
15.Renovated to Family Suite	0
16.Delta renovation	-36

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: FF&E consists of: Hard goods-single bed, nightstand, table lamp, combination desk/bookcase/chest of drawers, clock radio, desk chair, 5 drawer chest, recliner, floor lamp, ceiling fan, ironing board, iron, hairdryer, and dirty clothes basket, TV, VCR, refrigerator, microwave, coffee pot, toaster, dishes pots and pans, and silverware. Soft goods consist of: Mattress, pillows, sheets, blankets, drapes and shower curtain. All FF&E is in good condition.
- Recommendation: Although all FF&E is currently in good condition, it should be replaced within the next five years.

Foundations

Standard Foundations

- Analysis: The foundation is concrete footings and beams. The foundation appears to be in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete slab on grade is in good condition
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The flooring consists of concrete on metal pans and is in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof is constructed of metal trusses and purlins. The roof system is in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The exterior walls consist of a metal frame with CMU infill and a brick veneer. The exterior walls are in good condition.
- Recommendation: No corrective action required.

Exterior Windows

- Analysis: Exterior windows are double pane, insulated, anodized aluminum and are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: Exterior doors are metal in metal frames with closers, panic hardware and electronic locks. All are in good condition.
- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is a standing seam metal panel roof with exterior gutters and downspouts. All are in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The interior partitions are gypsum board on metal studs. All partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: Interior doors are solid core doors with standard hardware. Doors into the sleeping areas have electronic locks. Entry doors to each module are fire rated and also have electronic locks. All interior doors are structurally sound, but will need refinishing within the next five years.
- Recommendation: Refinish doors and reuse existing hardware.

Fittings

- Analysis: All fittings are in good condition.
- Recommendation: No corrective action required.

Stairs

Stair Construction

- Analysis: The stairs are cast-in-place concrete with quarry tile treads and rubber nosing. All stairs are in good structural condition, but the railing will need repainting within the next five years.
- Recommendation: Paint stair railing.

Interior Finishes

Wall Finishes

- Analysis: All walls are painted except for the common wall between sleeping rooms in each module. The paint is generally in good condition, however the walls should be covered with vinyl wall covering to meet the lodging standards
- Recommendation: Apply vinyl wall covering to all walls.

Floor Finishes

- Analysis: Floor finishes consist of 6X6 quarry tile in corridors, bathrooms, and kitchens and carpet in sleeping areas. All flooring finishes are currently in good condition, however they will need to be replaced within the next five years.
- Recommendation: Replace carpet and re-grout and seal the quarry tile.

Ceiling Finishes

- Analysis: Ceilings are painted gypsum board on metal studs. Although the paint is in good condition, the ceilings should be repainted within the next five years.

- Recommendation: Repaint the ceiling.

Plumbing

Plumbing Fixtures

- Analysis: All plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The domestic water system consists of a 500 gallon gas-fired hot water heater and 6 PVI hot water storage tanks containing approximately 300 gallons each, located in a common service module which services serves 4 buildings. Water supply lines are copper. All components are in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The heating /cooling system consists of a 4-pipe system with fan coil units with individual controls in each sleeping area. Hot water for heating is supplied by 10 Hydro-Therm gas-fired pulse boilers. Chilled water is supplied by a exterior Trane condensing unit. All mechanical equipment is in good condition.
- Recommendation: No corrective action required.

Fire Protection

Sprinklers

- Analysis: Each area is protected by a sprinkler system, which is in good condition.
- Recommendation: No corrective action required.

Electrical

Electrical Service/Distribution

- Analysis: The electrical system consists of a Square D 3-phase, 4-wire, 277/480 volt switchboard. A 600 A main distribution panel provides power to Square D sub-panels in each building. All are in good condition. Lighting and power circuits in each building are in good condition. GFCI receptacles are installed where required.
- Recommendation: No corrective action required.

Communications and Security

- Analysis: The communications system consists of Edwards System Technology fire notifiers, strobes, and a LAN system
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: There is no other equipment installed
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: There is no evidence of erosion or standing water. Site earthwork is in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: Parking for this facility consists of 4 areas totaling 205 parking spots servicing 8 buildings. The proportional share is 13,840 SF. The parking lots are in good condition, but will require seal coating within the next five years.
- Recommendation: Seal coat and re-stripe the parking lots.

Site Electrical Utilities

Site Lighting

- Analysis: Site lighting is both sufficient and in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

All of the back of the house functions are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

- **Extended Stay Guest Room**

Guest rooms are undersized at about 210 square feet each with shared kitchens and bathrooms.

Renovation Recommendation: Remove dividing wall between two shared rooms and renovate into one extended stay room of about 420 square feet each.

- **Public Spaces**

All of the Public Spaces are located in Building 3250 which serves as a support facility for secondary facilities of Buildings 3251-3254.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	0.38%	\$2,389.67
Parking: AC Pavement Damaged or Failing		\$2,389.67
09 Finishes	41.53%	\$263,772.73
Acoustical Ceiling Tile: Beyond expect useful life		\$8,993.22
Carpet: Beyond Useful Life		\$30,126.74
Floor Tile: Damaged or Failing		\$25,823.16
Interior ceilings: Paint Failing		\$10,585.85
Interior walls: Paint failing		\$7,200.36
Railings: Paint Failing		\$637.32
Vinyl Wall Covering: Beyond expected useful life		\$21,774.42
Vinyl Wall Covering: Damaged or Failing		\$126,966.35
Wood door: Finish failing or damaged		\$31,665.31
10 Specialties	1.41%	\$8,924.18
Sign: Damaged or Failing		\$8,924.18
19 FF&E	56.69%	\$360,000.00
Hard and soft goods: Beyond expected useful life		\$360,000.00
Total Raw Cost	100.00%	\$635,087.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$3,492.98
Force Protection	9.00%	\$63,187.98
General Conditions	10.00%	\$63,508.70
Total Additional Hard Cost		\$130,189.66

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$76,527.67
SIOH Conus	6.50%	\$54,717.28
Design	10.00%	\$76,527.67
08 MYr Inflation Fct	9.93%	\$96,623.79
Total Soft Cost		\$304,396.41
Total Project		\$1,069,673.07

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
09 Finishes	88.53%	\$141,317.37
Ceiling Finishes		\$47,351.52
Floor Finishes		\$48,816.00
Partitions		\$19,984.19
Wall Finishes		\$25,165.67
16 Electrical	11.47%	\$18,306.00
Lighting & Branch Wiring		\$18,306.00
Total Raw Cost	100.00%	\$159,623.37

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$877.93
Force Protection	9.00%	\$15,881.73
General Conditions	10.00%	\$15,962.34
Total Additional Hard Cost		\$32,721.99

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$19,234.54
SIOH Conus	6.50%	\$13,752.69
Design	10.00%	\$19,234.54
08 MYr Inflation Fct	9.93%	\$24,285.52
Total Soft Cost		\$76,507.28
Total Project Cost for Renovation		\$268,852.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.16%	\$76,737.74
Parking Lots		\$34,352.00
Site Earthwork		\$42,385.74
03 Concrete	18.11%	\$439,545.68
Floor Construction		\$305,911.88
Slab on Grade		\$31,334.90
Stair Construction		\$8,305.50
Standard Foundations		\$93,993.40
04 Masonry	5.27%	\$127,933.21
Exterior Walls		\$127,933.21
07 Thermal & Moisture Protection	5.32%	\$129,223.88
Roof Construction		\$51,676.67
Roof Coverings		\$77,547.21
08 Doors & Windows	9.89%	\$240,013.13
Exterior Doors		\$15,238.05
Exterior Windows		\$180,800.00
Interior Doors		\$43,975.08
09 Finishes	13.39%	\$325,008.67
Ceiling Finishes		\$50,301.50
Floor Finishes		\$123,980.12
Partitions		\$85,476.97
Wall Finishes		\$65,250.09
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.87%	\$142,380.00
Other Equipment		\$142,380.00
13 Special Construction	4.66%	\$113,168.05
Communications & Security		\$50,944.42
Sprinklers		\$62,223.63
15 Mechanical	19.87%	\$482,157.44
Cooling Generating Systems		\$150,389.44
Domestic Water Dist		\$73,224.00
Plumbing Fixtures		\$258,544.00
16 Electrical	6.96%	\$168,998.28
Electrical Service & Distribution		\$166,517.93
Site Lighting		\$2,480.35
19 FF&E	7.42%	\$180,000.00
Interior FF&E allowance		\$180,000.00
Total Raw Cost	100.00%	\$2,426,870.12

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,347.79

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$242,687.01
Total Additional Hard Cost		\$256,034.80

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,145.25
SIOH Conus	6.50%	\$183,108.26
Design	10.00%	\$268,290.49
08 MYr Inflation Fct	9.93%	\$324,556.98
Total Soft Cost		\$910,100.98
Total Project Cost for Replacement		\$3,593,005.90

**INSERT BUILDING 3254 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Building 4100

Building 4100 is part of a complex of five similar brick buildings constructed in 1965 and 1966. All are two stories high with a basement boiler room. Building 4100 has 32 extended stay units with a full kitchen and 8 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 37 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,599,980.00
Replacement Cost	\$3,594,680.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	44.51%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 4100 could be considered.

Attributes

01.Number of Units Constructed	40
02.Number of Units Used	40
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	32
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	8
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	40
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	37
15.Renovated to Family Suite	0
16.Delta renovation	-3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, wardrobe units, easy chairs, sofas, coffee tables, dining tables with chairs, TV's, TV stands, desks with chair, end tables, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor in the basement appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The floor structure is a wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between brick areas has paint that is failing.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass that are in good condition. The other doors to the exterior are hollow metal, and are in fair condition.

- Recommendation: Replace the commercial steel doors, frames and hardware.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering appears to be in fair condition.
- Recommendation: Replace the asphalt shingle roofing.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior steel fire doors are damaged and in failing condition. The interior doors are in fair condition.
- Recommendation: Replace the interior steel doors and interior wood doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition. The vinyl wall covering is in fair condition.
- Recommendation: Repaint the walls. Replace the vinyl wall covering.

Floor Finishes

- Analysis: The carpeting is in fair condition. The quarry tile in the vestibules is in fair condition. The VCT in the bathrooms & kitchens is in fair condition.
- Recommendation: Replace the carpet and quarry tile. Replace the VCT with sheet vinyl.

Ceiling Finishes

- Analysis: The ceiling tiles in the corridors and common areas appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Replace the ceiling tiles in the corridors and commons are. Repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition. The water heater is in fair condition.
- Recommendation: Replace the water heater.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in poor condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition.
- Recommendation: Install a new main service panel.

Communications and Security

- Analysis: The Faraday and Edwards components are installed and are in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site is appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in good to fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good.
- Recommendation: No corrective action required

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room, Staff Toilet, Clean & Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Does not exist or undersized.

Renovation Recommendation: Will be included as part of renovation to this building.

- **Public Spaces**

Vending, Phones, Bell Cart, Study Rooms, Gear Wash

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	3.54%	\$31,193.42
Parking: AC Pavement Damaged or Failing		\$31,193.42
06 Wood & Plastics	9.13%	\$80,347.52
Cabinets: Damaged or Failing		\$80,347.52
07 Thermal & Moisture Protection	5.79%	\$50,985.84
Asphalt Shingle Roof: Beyond Useful Life		\$37,236.00
Steel Siding: Damaged or Failing		\$13,749.84
08 Doors & Windows	24.20%	\$212,970.51
Exterior Steel Door - Damaged or Failing		\$14,984.34
Interior Steel Door - Damaged or Failing		\$3,083.77
Wood Door - Beyond Useful Life		\$194,902.40
09 Finishes	12.84%	\$113,014.56
Acoustical Ceiling Tiles: Damaged or Failing		\$5,013.85
Carpet: Damaged or Failing		\$51,463.90
Interior ceilings: Paint Failing		\$9,603.81
Interior wall: Missing or inadequate		\$7,680.00
Interior walls: Paint failing		\$20,737.04
Quarry Floor Tile: Damaged or Failing		\$935.90
VCT: Beyond Useful Life		\$5,462.57
Vinyl Wall Covering: Damaged or Failing		\$12,117.49
13 Special Construction	9.16%	\$80,580.30
Fire Sprinklers: Missing or Inadequate		\$80,580.30
15 Mechanical	9.61%	\$84,576.66
PTAC: Missing or inadequate		\$81,045.41
Water heater: Beyond expected useful life		\$3,531.25
16 Electrical	2.99%	\$26,351.60
Main service: Beyond expected useful life		\$26,351.60
19 FF&E	22.73%	\$200,000.00
Hard and soft goods: Beyond expected useful life		\$200,000.00
Total Raw Cost	100.00%	\$880,020.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,840.11
Force Protection	9.00%	\$87,557.59
General Conditions	10.00%	\$88,002.00
Total Additional Hard Cost		\$180,399.70

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
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Contingency	10.00%	\$106,041.97
SIOH Conus	6.50%	\$75,820.01
Design	10.00%	\$106,041.97
08 MYr Inflation Fct	9.93%	\$133,888.54
Total Soft Cost		\$421,792.49
Total Project		\$1,482,212.19

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.87%	\$6,203.70
Exterior Doors		\$2,928.96
Interior Doors		\$3,274.74
09 Finishes	45.35%	\$31,709.60
Ceiling Finishes		\$5,590.11
Floor Finishes		\$6,734.80
Partitions		\$9,301.81
Wall Finishes		\$10,082.88
11 Equipment	9.70%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	2.75%	\$1,921.00
Communications & Security		\$960.50
Sprinklers		\$960.50
15 Mechanical	18.63%	\$13,024.38
Cooling Generating Systems		\$3,842.00
Plumbing Fixtures		\$9,182.38
16 Electrical	14.71%	\$10,283.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$5,763.00
Total Raw Cost	100.00%	\$69,921.68

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$384.57
Force Protection	9.00%	\$6,956.86
General Conditions	10.00%	\$6,992.17
Total Additional Hard Cost		\$14,333.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,425.53
SIOH Conus	6.50%	\$6,024.25
Design	10.00%	\$8,425.53
08 MYr Inflation Fct	9.93%	\$10,638.07
Total Soft Cost		\$33,513.37
Total Project Cost for Renovation		\$117,768.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	4.07%	\$98,779.37
Parking Lots		\$35,210.80
Site Earthwork		\$63,568.57
03 Concrete	14.83%	\$360,007.32
Floor Construction		\$210,632.62
Slab on Grade		\$47,024.95
Stair Construction		\$8,305.50
Standard Foundations		\$94,044.25
04 Masonry	5.33%	\$129,436.60
Exterior Walls		\$129,436.60
07 Thermal & Moisture Protection	6.93%	\$168,314.11
Roof Construction		\$52,332.83
Roof Coverings		\$115,981.28
08 Doors & Windows	9.77%	\$237,122.59
Exterior Doors		\$11,102.25
Exterior Windows		\$185,320.00
Interior Doors		\$40,700.34
09 Finishes	13.74%	\$333,651.85
Ceiling Finishes		\$51,674.69
Floor Finishes		\$127,109.01
Partitions		\$87,810.24
Wall Finishes		\$67,057.91
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.03%	\$146,335.00
Other Equipment		\$146,335.00
13 Special Construction	4.66%	\$113,229.28
Communications & Security		\$50,971.98
Sprinklers		\$62,257.29
15 Mechanical	20.08%	\$487,578.05
Cooling Generating Systems		\$150,470.80
Domestic Water Dist		\$75,258.00
Plumbing Fixtures		\$261,849.25
16 Electrical	6.87%	\$166,841.68
Electrical Service & Distribution		\$164,361.33
Site Lighting		\$2,480.35
19 FF&E	7.62%	\$185,000.00
Interior FF&E allowance		\$185,000.00
Total Raw Cost	100.00%	\$2,427,999.88

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,354.00
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$242,799.99
Total Additional Hard Cost		\$256,153.99

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,207.69
SIOH Conus	6.50%	\$183,193.50
Design	10.00%	\$268,415.39
08 MYr Inflation Fct	9.93%	\$324,708.07
Total Soft Cost		\$910,524.65
Total Project Cost for Replacement		\$3,594,678.51

**INSERT BUILDING 4100 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**

Building 4101



*Ft. Leonard Wood, MO., Building 4101,
Exterior View*

Building 4101 is part of a complex of five similar brick buildings constructed in 1965 and 1966. All are two stories high with a basement boiler room. Building 4101 has 32 extended stay units with a full kitchen and 8 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 37 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost \$1,664,795.00

Replacement Cost \$3,594,680.00

Condition Assessment & Renovation Cost to Replacement Cost

Ratio 46.31%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 4101 could be considered.

Attributes

01.Number of Units Constructed	40
02.Number of Units Used	40
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	32
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	8
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	40
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	37
15.Renovated to Family Suite	0
16.Delta renovation	-3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, sofas, coffee tables, dining tables with chairs, TV's, TV stands, desks with chair, end tables, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor in the basement appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The floor structure is a wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between the brick areas has paint in fair condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass. They are in good condition.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass that are in good condition. The other doors to the exterior are hollow metal and are in fair condition.

- Recommendation: Replace the commercial steel doors, frames and hardware.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering appears to be in fair condition.
- Recommendation: Replace the asphalt shingle roof.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior steel fire doors are in poor condition. The guest room entry, and other interior doors are in fair condition.
- Recommendation: Replace the interior steel doors. Replace the interior wood doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition. The vinyl wall covering is in fair condition.
- Recommendation: Repaint the walls. Replace the vinyl wall covering.

Floor Finishes

- Analysis: The carpeting, quarry tile and VCT are in poor condition.
- Recommendation: Replace the carpet and quarry tile. Replace the VCT with sheet vinyl.

Ceiling Finishes

- Analysis: The ceiling tiles in the corridors and common areas appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Replace the ceiling tiles in the corridors and common areas and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The wall mounted lavatory is in poor condition. The original water closet with a flush valve is in fair condition.
- Recommendation: Replace the existing wall mount with tank type water closet. Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in fair condition.
- Recommendation: Replace the water heater.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition.
- Recommendation: Install a new main service panel.

Communications and Security

- Analysis: A Safetech-Series 1000 is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site is in generally good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room, Staff Toilet, Clean & Dirty Linen Room

Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

House Keeping

Does not exist or undersized.

Renovation Recommendation: Will be included as part of renovation to this building.

- **Public Spaces**

Vending, Phones, Bell Cart, Study Rooms, Gear Wash

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	3.40%	\$31,193.42
Parking: AC Pavement Damaged or Failing		\$31,193.42
06 Wood & Plastics	8.75%	\$80,347.52
Cabinets: Damaged or Failing		\$80,347.52
07 Thermal & Moisture Protection	5.55%	\$50,985.84
Asphalt Shingle Roof: Beyond Useful Life		\$37,236.00
Steel Siding: Damaged or Failing		\$13,749.84
08 Doors & Windows	18.70%	\$171,735.68
Exterior Steel Door - Damaged or Failing		\$12,729.99
Interior Steel Door - Damaged or Failing		\$3,083.77
Wood Door - Beyond Useful Life		\$155,921.92
09 Finishes	12.30%	\$113,014.56
Acoustical Ceiling Tiles: Damaged or Failing		\$5,013.85
Carpet: Damaged or Failing		\$51,463.90
Interior ceilings: Paint Failing		\$9,603.81
Interior wall: Missing or inadequate		\$7,680.00
Interior walls: Paint failing		\$20,737.04
Quarry Floor Tile: Damaged or Failing		\$935.90
VCT: Beyond Useful Life		\$5,462.57
Vinyl Wall Covering: Damaged or Failing		\$12,117.49
13 Special Construction	8.77%	\$80,580.30
Fire Sprinklers: Missing or Inadequate		\$80,580.30
15 Mechanical	17.89%	\$164,291.38
PTAC: Missing or inadequate		\$81,045.41
Sink & vanity: Replace due to remodel		\$34,926.04
Water closet: Beyond expected useful life		\$44,788.68
Water heater: Beyond expected useful life		\$3,531.25
16 Electrical	2.87%	\$26,351.60
Main service: Beyond expected useful life		\$26,351.60
19 FF&E	21.77%	\$200,000.00
Hard and soft goods: Beyond expected useful life		\$200,000.00
Total Raw Cost	100.00%	\$918,500.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$5,051.75
Force Protection	9.00%	\$91,386.16
General Conditions	10.00%	\$91,850.00
Total Additional Hard Cost		\$188,287.91

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$110,678.79
SIOH Conus	6.50%	\$79,135.34
Design	10.00%	\$110,678.79
08 MYr Inflation Fct	9.93%	\$139,742.99
Total Soft Cost		\$440,235.90
Total Project		\$1,547,023.81

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.87%	\$6,203.70
Exterior Doors		\$2,928.96
Interior Doors		\$3,274.74
09 Finishes	45.35%	\$31,709.60
Ceiling Finishes		\$5,590.11
Floor Finishes		\$6,734.80
Partitions		\$9,301.81
Wall Finishes		\$10,082.88
11 Equipment	9.70%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	2.75%	\$1,921.00
Communications & Security		\$960.50
Sprinklers		\$960.50
15 Mechanical	18.63%	\$13,024.38
Cooling Generating Systems		\$3,842.00
Plumbing Fixtures		\$9,182.38
16 Electrical	14.71%	\$10,283.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$5,763.00
Total Raw Cost	100.00%	\$69,921.68

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$384.57
Force Protection	9.00%	\$6,956.86
General Conditions	10.00%	\$6,992.17
Total Additional Hard Cost		\$14,333.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,425.53
SIOH Conus	6.50%	\$6,024.25
Design	10.00%	\$8,425.53
08 MYr Inflation Fct	9.93%	\$10,638.07
Total Soft Cost		\$33,513.37
Total Project Cost for Renovation		\$117,768.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	4.07%	\$98,779.37
Parking Lots		\$35,210.80
Site Earthwork		\$63,568.57
03 Concrete	14.83%	\$360,007.32
Floor Construction		\$210,632.62
Slab on Grade		\$47,024.95
Stair Construction		\$8,305.50
Standard Foundations		\$94,044.25
04 Masonry	5.33%	\$129,436.60
Exterior Walls		\$129,436.60
07 Thermal & Moisture Protection	6.93%	\$168,314.11
Roof Construction		\$52,332.83
Roof Coverings		\$115,981.28
08 Doors & Windows	9.77%	\$237,122.59
Exterior Doors		\$11,102.25
Exterior Windows		\$185,320.00
Interior Doors		\$40,700.34
09 Finishes	13.74%	\$333,651.85
Ceiling Finishes		\$51,674.69
Floor Finishes		\$127,109.01
Partitions		\$87,810.24
Wall Finishes		\$67,057.91
10 Specialties	0.07%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.03%	\$146,335.00
Other Equipment		\$146,335.00
13 Special Construction	4.66%	\$113,229.28
Communications & Security		\$50,971.98
Sprinklers		\$62,257.29
15 Mechanical	20.08%	\$487,578.05
Cooling Generating Systems		\$150,470.80
Domestic Water Dist		\$75,258.00
Plumbing Fixtures		\$261,849.25
16 Electrical	6.87%	\$166,841.68
Electrical Service & Distribution		\$164,361.33
Site Lighting		\$2,480.35
19 FF&E	7.62%	\$185,000.00
Interior FF&E allowance		\$185,000.00
Total Raw Cost	100.00%	\$2,427,999.88

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$13,354.00
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$242,799.99
Total Additional Hard Cost		\$256,153.99

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$134,207.69
SIOH Conus	6.50%	\$183,193.50
Design	10.00%	\$268,415.39
08 MYr Inflation Fct	9.93%	\$324,708.07
Total Soft Cost		\$910,524.65
Total Project Cost for Replacement		\$3,594,678.51

**INSERT BUILDING 4101 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Ft. Leonard Wood, MO., Building 4102, Exterior View

Building 4102

Building 4102 is part of a complex of five similar brick buildings constructed in 1965 and 1966. All are two stories high with a basement boiler room. Building 4102 has 35 extended stay units with a full kitchen and 8 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 43 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost \$1,539,020.00

Replacement Cost \$4,105,740.00

Condition Assessment & Renovation Cost to Replacement Cost

Ratio 37.48%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 4102 could be considered.

Attributes

01.Number of Units Constructed	44
02.Number of Units Used	43
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	35
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	8
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	35
12.Operating as Family Suite	8
13.Renovated to Standard	0
14.Renovated to Extended Stay	43
15.Renovated to Family Suite	0
16.Delta renovation	0

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, sofas, coffee tables, dining tables with chairs, TV's, TV stands, desks with chair, end tables, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor in the basement appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The floor structure is a wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between the brick has paint in poor condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass and are in good condition. The other doors to the exterior are hollow metal and are in fair condition.

- Recommendation: Replace the commercial steel doors, frames and hardware.

Roofing

Roof Coverings

- Analysis: The roof is covered with three tab asphalt shingles on a wood deck. The roof covering was installed in 1995, and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior steel doors are in fair condition. The interior doors are in fair condition.
- Recommendation: Replace the interior steel doors. Replace the interior wood doors.

Fittings

- Analysis: The electronic locks on wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpet, quarry tile and VCT are in poor condition.
- Recommendation: Replace the carpet and quarry tile. Replace the VCT with sheet vinyl flooring.

Ceiling Finishes

- Analysis: The ceiling tiles in the corridors and common areas appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Replace the ceiling tiles in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The water distribution system is in fair condition.
- Recommendation: Replace the water heater.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition.
- Recommendation: Install a new main service panel.

Communications and Security

- Analysis: A Pyrotronics-System 3 is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good.
- Recommendation: No corrective action required

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilets, Clean & Dirty Linen Room,
Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Administrative Conference, and Storage

Exists. Not a standard for a secondary facility

Renovation Recommendation: Will be removed as part of renovation to this building.

- **Public Spaces**

Study Rooms, Phones, Gear Wash, Phones, Bell Cart,
Guest Laundry, Vending

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Guest Laundry/ Vending

Does not exist.

Renovation Recommendation: Will be included as part of renovation to this building.

Breakfast Area

Exists. Not a standard for a secondary facility

Renovation Recommendation: Will be removed as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	4.31%	\$36,392.32
Parking: AC Pavement Damaged or Failing		\$36,392.32
07 Thermal & Moisture Protection	1.88%	\$15,853.01
Steel Siding: Damaged or Failing		\$15,853.01
08 Doors & Windows	28.75%	\$242,569.74
Exterior Steel Door - Damaged or Failing		\$10,475.64
Interior Steel Door - Damaged or Failing		\$3,083.77
Wood Door - Beyond Useful Life		\$229,010.33
09 Finishes	15.19%	\$128,191.90
Acoustical Ceiling Tiles: Damaged or Failing		\$6,146.11
Carpet: Damaged or Failing		\$61,423.12
Interior ceilings: Paint Failing		\$10,283.84
Interior wall: Missing or inadequate		\$7,680.00
Interior walls: Paint failing		\$22,177.12
Quarry Floor Tile: Damaged or Failing		\$935.90
VCT: Beyond Useful Life		\$5,462.57
Vinyl Wall Covering: Damaged or Failing		\$14,083.24
13 Special Construction	11.25%	\$94,888.93
Fire Sprinklers: Missing or Inadequate		\$94,888.93
15 Mechanical	10.02%	\$84,576.66
PTAC: Missing or inadequate		\$81,045.41
Water heater: Beyond expected useful life		\$3,531.25
16 Electrical	3.12%	\$26,351.60
Main service: Beyond expected useful life		\$26,351.60
19 FF&E	25.48%	\$215,000.00
Hard and soft goods: Beyond expected useful life		\$215,000.00
Total Raw Cost	100.00%	\$843,824.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,641.03
Force Protection	9.00%	\$83,956.27
General Conditions	10.00%	\$84,382.40
Total Additional Hard Cost		\$172,979.70

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$101,680.37
SIOH Conus	6.50%	\$72,701.46
Design	10.00%	\$101,680.37

08 MYr Inflation Fct	9.93%	\$128,381.58
Total Soft Cost		\$404,443.79
Total Project		\$1,421,247.49

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.87%	\$6,203.70
Exterior Doors		\$2,928.96
Interior Doors		\$3,274.74
09 Finishes	45.35%	\$31,709.60
Ceiling Finishes		\$5,590.11
Floor Finishes		\$6,734.80
Partitions		\$9,301.81
Wall Finishes		\$10,082.88
11 Equipment	9.70%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	2.75%	\$1,921.00
Communications & Security		\$960.50
Sprinklers		\$960.50
15 Mechanical	18.63%	\$13,024.38
Cooling Generating Systems		\$3,842.00
Plumbing Fixtures		\$9,182.38
16 Electrical	14.71%	\$10,283.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$5,763.00
Total Raw Cost	100.00%	\$69,921.68

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$384.57
Force Protection	9.00%	\$6,956.86
General Conditions	10.00%	\$6,992.17
Total Additional Hard Cost		\$14,333.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,425.53
SIOH Conus	6.50%	\$6,024.25
Design	10.00%	\$8,425.53
08 MYr Inflation Fct	9.93%	\$10,638.07
Total Soft Cost		\$33,513.37
Total Project Cost for Renovation		\$117,768.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	4.13%	\$114,523.66
Parking Lots		\$41,222.40
Site Earthwork		\$73,301.26
03 Concrete	14.89%	\$412,951.98
Floor Construction		\$241,949.08
Slab on Grade		\$54,234.35
Stair Construction		\$8,305.50
Standard Foundations		\$108,463.05
04 Masonry	5.21%	\$144,348.65
Exterior Walls		\$144,348.65
07 Thermal & Moisture Protection	6.99%	\$193,980.31
Roof Construction		\$60,351.99
Roof Coverings		\$133,628.32
08 Doors & Windows	9.73%	\$269,856.43
Exterior Doors		\$11,102.25
Exterior Windows		\$212,440.00
Interior Doors		\$46,314.18
09 Finishes	13.92%	\$386,134.34
Ceiling Finishes		\$59,903.94
Floor Finishes		\$147,353.34
Partitions		\$101,256.99
Wall Finishes		\$77,620.06
10 Specialties	0.06%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.13%	\$170,065.00
Other Equipment		\$170,065.00
13 Special Construction	4.71%	\$130,589.51
Communications & Security		\$58,786.97
Sprinklers		\$71,802.54
15 Mechanical	19.57%	\$542,683.63
Cooling Generating Systems		\$173,540.88
Domestic Water Dist		\$87,462.00
Plumbing Fixtures		\$281,680.75
16 Electrical	6.90%	\$191,353.64
Electrical Service & Distribution		\$188,873.29
Site Lighting		\$2,480.35
19 FF&E	7.75%	\$215,000.00
Interior FF&E allowance		\$215,000.00
Total Raw Cost	100.00%	\$2,773,191.19

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$15,252.55
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$277,319.12
Total Additional Hard Cost		\$292,571.67

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$153,288.14
SIOH Conus	6.50%	\$209,238.32
Design	10.00%	\$306,576.29
08 MYr Inflation Fct	9.93%	\$370,872.15
Total Soft Cost		\$1,039,974.90
Total Project Cost for Replacement		\$4,105,737.76

**INSERT BUILDING 4102 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



*Ft. Leonard Wood, MO., Building 4103,
Exterior View*

Building 4103

Building 4103 is part of a complex of five similar brick buildings constructed in 1965 and 1966. All are two stories high with a basement boiler room. Building 4103 has 40 extended stay units with a full kitchen and 4 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 41 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,672,415.00
Replacement Cost	\$3,935,010.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	42.50%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 4103 could be considered.

Attributes

01.Number of Units Constructed	44
02.Number of Units Used	44
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	40
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	4
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	40
12.Operating as Family Suite	4
13.Renovated to Standard	0
14.Renovated to Extended Stay	41
15.Renovated to Family Suite	0
16.Delta renovation	-3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, sofas, coffee tables, dining tables with chairs, TV's, TV stands, desks with chair, end tables, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor in basement appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The structure is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between the brick has paint that is fair condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass and in good condition. The other doors to the exterior are hollow metal, and are in fair condition.

- Recommendation: Replace the commercial steel doors, frames and hardware.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1995 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in fair condition. The interior steel doors are in fair condition.
- Recommendation: Replace the interior wood doors. Replace the interior steel doors.

Fittings

- Analysis: The electronic locks on wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpet, quarry tile and VCT are in fair condition.
- Recommendation: Replace the carpet and the quarry tile. Replace the VCT with sheet vinyl.

Ceiling Finishes

- Analysis: The ceiling tiles in the corridors and common areas appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Replace the ceiling tiles in the corridors and common areas and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The water closet and lavatory sink plumbing fixtures are original and in fair condition.
- Recommendation: Replace the water closet with tank type units. Replace the wall mounted lavatory with sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in poor condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition.
- Recommendation: Install a new main service panel.

Communications and Security

- Analysis: A Safetech-Series 1000 is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilets, Clean & Dirty Linen Room,
Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

- **Public Spaces**

Study Rooms, Phones, Gear Wash, Phones, Bell Cart,
Guest Laundry, Vending

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Guest Laundry/ Vending

Does not exist.

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	3.94%	\$36,392.32
Parking: AC Pavement Damaged or Failing		\$36,392.32
06 Wood & Plastics	7.18%	\$66,286.70
Cabinets: Damaged or Failing		\$66,286.70
07 Thermal & Moisture Protection	1.97%	\$18,180.35
Steel Siding: Damaged or Failing		\$18,180.35
08 Doors & Windows	20.05%	\$185,073.52
Exterior Steel Door - Damaged or Failing		\$10,475.64
Interior Steel Door - Damaged or Failing		\$3,083.77
Wood Door - Beyond Useful Life		\$171,514.11
09 Finishes	13.38%	\$123,490.07
Acoustical Ceiling Tiles: Damaged or Failing		\$6,146.11
Carpet: Damaged or Failing		\$55,650.78
Interior ceilings: Paint Failing		\$10,359.19
Interior wall: Missing or inadequate		\$3,840.00
Interior walls: Paint failing		\$21,889.10
Quarry Floor Tile: Damaged or Failing		\$935.90
VCT: Beyond Useful Life		\$12,300.18
Vinyl Wall Covering: Damaged or Failing		\$12,368.81
13 Special Construction	9.37%	\$86,491.56
Fire Sprinklers: Missing or Inadequate		\$86,491.56
15 Mechanical	17.42%	\$160,760.13
PTAC: Missing or inadequate		\$81,045.41
Sink & vanity: Replace due to remodel		\$34,926.04
Water closet: Beyond expected useful life		\$44,788.68
16 Electrical	2.85%	\$26,351.60
Main service: Beyond expected useful life		\$26,351.60
19 FF&E	23.83%	\$220,000.00
Hard and soft goods: Beyond expected useful life		\$220,000.00
Total Raw Cost	100.00%	\$923,026.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$5,076.64
Force Protection	9.00%	\$91,836.47
General Conditions	10.00%	\$92,302.60
Total Additional Hard Cost		\$189,215.71

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
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Contingency	10.00%	\$111,224.17
SIOH Conus	6.50%	\$79,525.28
Design	10.00%	\$111,224.17
08 MYr Inflation Fct	9.93%	\$140,431.58
Total Soft Cost		\$442,405.21
Total Project		\$1,554,646.92

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.87%	\$6,203.70
Exterior Doors		\$2,928.96
Interior Doors		\$3,274.74
09 Finishes	45.35%	\$31,709.60
Ceiling Finishes		\$5,590.11
Floor Finishes		\$6,734.80
Partitions		\$9,301.81
Wall Finishes		\$10,082.88
11 Equipment	9.70%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	2.75%	\$1,921.00
Communications & Security		\$960.50
Sprinklers		\$960.50
15 Mechanical	18.63%	\$13,024.38
Cooling Generating Systems		\$3,842.00
Plumbing Fixtures		\$9,182.38
16 Electrical	14.71%	\$10,283.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$5,763.00
Total Raw Cost	100.00%	\$69,921.68

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$384.57
Force Protection	9.00%	\$6,956.86
General Conditions	10.00%	\$6,992.17
Total Additional Hard Cost		\$14,333.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,425.53
SIOH Conus	6.50%	\$6,024.25
Design	10.00%	\$8,425.53
08 MYr Inflation Fct	9.93%	\$10,638.07
Total Soft Cost		\$33,513.37
Total Project Cost for Renovation		\$117,768.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	4.12%	\$109,560.56
Parking Lots		\$39,504.80
Site Earthwork		\$70,055.76
03 Concrete	14.84%	\$394,543.05
Floor Construction		\$230,755.20
Slab on Grade		\$51,827.45
Stair Construction		\$8,305.50
Standard Foundations		\$103,654.90
04 Masonry	5.25%	\$139,576.79
Exterior Walls		\$139,576.79
07 Thermal & Moisture Protection	6.98%	\$185,430.07
Roof Construction		\$57,680.90
Roof Coverings		\$127,749.17
08 Doors & Windows	9.74%	\$258,945.15
Exterior Doors		\$11,102.25
Exterior Windows		\$203,400.00
Interior Doors		\$44,442.90
09 Finishes	13.87%	\$368,668.37
Ceiling Finishes		\$57,160.86
Floor Finishes		\$140,605.23
Partitions		\$96,783.96
Wall Finishes		\$74,118.33
10 Specialties	0.06%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.10%	\$162,155.00
Other Equipment		\$162,155.00
13 Special Construction	4.70%	\$124,800.50
Communications & Security		\$56,180.96
Sprinklers		\$68,619.54
15 Mechanical	19.73%	\$524,312.09
Cooling Generating Systems		\$165,847.84
Domestic Water Dist		\$83,394.00
Plumbing Fixtures		\$275,070.25
16 Electrical	6.89%	\$183,179.78
Electrical Service & Distribution		\$180,699.43
Site Lighting		\$2,480.35
19 FF&E	7.71%	\$205,000.00
Interior FF&E allowance		\$205,000.00
Total Raw Cost	100.00%	\$2,657,875.41

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$14,618.31
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$265,787.54
Total Additional Hard Cost		\$280,405.86

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$146,914.06
SIOH Conus	6.50%	\$200,537.70
Design	10.00%	\$293,828.13
08 MYr Inflation Fct	9.93%	\$355,450.42
Total Soft Cost		\$996,730.31
Total Project Cost for Replacement		\$3,935,011.57

**INSERT BUILDING 4103 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



Ft. Leonard Wood, MO., Building 4104, Exterior View

Building 4104

Building 4104 is part of a complex of five similar brick buildings constructed in 1965 and 1966. All are two stories high with a basement boiler room. Building 4104 has 39 extended stay units with a full kitchen and 8 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 45 extended stay rooms. The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment & Renovation Cost	\$1,609,105.00
Replacement Cost	\$4,277,030.00
Condition Assessment & Renovation Cost to Replacement Cost Ratio	37.62%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, renovation of Building 4104 could be considered.

Attributes

01.Number of Units Constructed	48
02.Number of Units Used	47
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	39
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	8
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	8
11.Operating as Extended Stay	39
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	45
15.Renovated to Family Suite	0
16.Delta renovation	-3

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, sofas, coffee tables, dining tables with chairs, TV's, TV stands, desks with chair, end tables, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor in the basement appears to be in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The structure is a wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to a sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between the brick has been repainted. The paint is in fair condition.
- Recommendation: The brick walls appear to be in good condition. Replace the steel siding with vinyl siding

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass.
- Recommendation: No corrective action required.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass and in good condition. The other doors to the exterior are hollow metal and are in fair condition.
- Recommendation: Replace the commercial steel doors, frames and hardware.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1995 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in fair condition. The interior steel doors are in fair condition.
- Recommendation: Replace the interior wood doors. Replace the interior steel doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in good to fair condition. The vinyl wall coverings are in fair condition.
- Recommendation: Repaint the walls. Replace the vinyl wall coverings.

Floor Finishes

- Analysis: The carpet, quarry tile and VCT are in fair condition.
- Recommendation: Replace the VCT with sheet vinyl flooring. Replace the carpet and quarry tile.

Ceiling Finishes

- Analysis: The ceiling tiles in the corridors and common areas appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.

- Recommendation: Replace the ceiling tiles in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

Domestic Water Distribution

- Analysis: The water heater is in poor condition.
- Recommendation: Replace the water heater.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition.
- Recommendation: Install a new main service panel.

Communications and Security

- Analysis: A Safetech-Series 1000 is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Break Room and Staff Toilets, Clean & Dirty Linen Room,
Does not exist

Renovation Recommendation: Will be included as part of renovation to this building.

- **Public Spaces**

Study Rooms, Phones, Gear Wash, Phones, Bell Cart,
Guest Laundry, Vending

Do not exist

Renovation Recommendation: Will be included as part of renovation to this building.

Guest Laundry/ Vending

Does not exist.

Renovation Recommendation: Will be included as part of renovation to this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	4.11%	\$36,392.32
Parking: AC Pavement Damaged or Failing		\$36,392.32
07 Thermal & Moisture Protection	1.79%	\$15,853.01
Steel Siding: Damaged or Failing		\$15,853.01
08 Doors & Windows	27.40%	\$242,569.74
Exterior Steel Door - Damaged or Failing		\$10,475.64
Interior Steel Door - Damaged or Failing		\$3,083.77
Wood Door - Beyond Useful Life		\$229,010.33
09 Finishes	15.58%	\$137,988.48
Acoustical Ceiling Tiles: Damaged or Failing		\$6,146.11
Carpet: Damaged or Failing		\$60,813.38
Interior ceilings: Paint Failing		\$11,190.55
Interior wall: Missing or inadequate		\$7,680.00
Interior walls: Paint failing		\$24,097.21
Quarry Floor Tile: Damaged or Failing		\$935.90
VCT: Beyond Useful Life		\$13,042.09
Vinyl Wall Covering: Damaged or Failing		\$14,083.24
13 Special Construction	10.72%	\$94,888.93
Fire Sprinklers: Missing or Inadequate		\$94,888.93
15 Mechanical	10.89%	\$96,393.29
PTAC: Missing or inadequate		\$92,862.04
Water heater: Beyond expected useful life		\$3,531.25
16 Electrical	2.98%	\$26,351.60
Main service: Beyond expected useful life		\$26,351.60
19 FF&E	26.54%	\$235,000.00
Hard and soft goods: Beyond expected useful life		\$235,000.00
Total Raw Cost	100.00%	\$885,437.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,869.90
Force Protection	9.00%	\$88,096.55
General Conditions	10.00%	\$88,543.70
Total Additional Hard Cost		\$181,510.16

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$106,694.72
SIOH Conus	6.50%	\$76,286.72
Design	10.00%	\$106,694.72

08 MYr Inflation Fct	9.93%	\$134,712.69
Total Soft Cost		\$424,388.85
Total Project		\$1,491,336.01

Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

Summary of Project Renovation Cost

CSI	Percent	Amount
08 Doors & Windows	8.87%	\$6,203.70
Exterior Doors		\$2,928.96
Interior Doors		\$3,274.74
09 Finishes	45.35%	\$31,709.60
Ceiling Finishes		\$5,590.11
Floor Finishes		\$6,734.80
Partitions		\$9,301.81
Wall Finishes		\$10,082.88
11 Equipment	9.70%	\$6,780.00
Other Equipment		\$6,780.00
13 Special Construction	2.75%	\$1,921.00
Communications & Security		\$960.50
Sprinklers		\$960.50
15 Mechanical	18.63%	\$13,024.38
Cooling Generating Systems		\$3,842.00
Plumbing Fixtures		\$9,182.38
16 Electrical	14.71%	\$10,283.00
Electrical Service & Distribution		\$4,520.00
Lighting & Branch Wiring		\$5,763.00
Total Raw Cost	100.00%	\$69,921.68

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$384.57
Force Protection	9.00%	\$6,956.86
General Conditions	10.00%	\$6,992.17
Total Additional Hard Cost		\$14,333.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$8,425.53
SIOH Conus	6.50%	\$6,024.25
Design	10.00%	\$8,425.53
08 MYr Inflation Fct	9.93%	\$10,638.07
Total Soft Cost		\$33,513.37
Total Project Cost for Renovation		\$117,768.65

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	4.14%	\$119,482.95
Parking Lots		\$42,940.00
Site Earthwork		\$76,542.95
03 Concrete	14.93%	\$431,344.42
Floor Construction		\$253,137.77
Slab on Grade		\$56,635.60
Stair Construction		\$8,305.50
Standard Foundations		\$113,265.55
04 Masonry	5.18%	\$149,716.99
Exterior Walls		\$149,716.99
07 Thermal & Moisture Protection	7.01%	\$202,500.47
Roof Construction		\$62,983.42
Roof Coverings		\$139,517.05
08 Doors & Windows	9.72%	\$280,767.71
Exterior Doors		\$11,102.25
Exterior Windows		\$221,480.00
Interior Doors		\$48,185.46
09 Finishes	13.97%	\$403,462.08
Ceiling Finishes		\$62,647.03
Floor Finishes		\$154,101.46
Partitions		\$105,591.80
Wall Finishes		\$81,121.80
10 Specialties	0.06%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	6.16%	\$177,975.00
Other Equipment		\$177,975.00
13 Special Construction	4.72%	\$136,371.72
Communications & Security		\$61,389.93
Sprinklers		\$74,981.79
15 Mechanical	19.42%	\$561,046.13
Cooling Generating Systems		\$181,224.88
Domestic Water Dist		\$91,530.00
Plumbing Fixtures		\$288,291.25
16 Electrical	6.91%	\$199,517.89
Electrical Service & Distribution		\$197,037.54
Site Lighting		\$2,480.35
19 FF&E	7.79%	\$225,000.00
Interior FF&E allowance		\$225,000.00
Total Raw Cost	100.00%	\$2,888,889.40

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$15,888.89
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$288,888.94
Total Additional Hard Cost		\$304,777.83

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$159,683.36
SIOH Conus	6.50%	\$217,967.79
Design	10.00%	\$319,366.72
08 MYr Inflation Fct	9.93%	\$386,345.03
Total Soft Cost		\$1,083,362.90
Total Project Cost for Replacement		\$4,277,030.14

**INSERT BUILDING 4104 FLOOR PLANS HERE
(EXISTING AND RENOVATION PLANS)**



*Ft. Leonard Wood, MO., Building 4110,
Exterior View*

Building 4110

Building 4110 is part of a complex of three two-story brick and aluminum siding buildings which were constructed in 1973. All three have sloped shingled roofs, and none have basements. Buildings 4110 contains 25 standard units with a full kitchen.

Significant Assumptions

The replacement cost model is based on 23 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,350,670.00
Replacement Cost	\$2,397,820.00
Condition Assessment to Replacement Cost Ratio	56.33%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4110 is not recommended.

Attributes

01.Number of Units Constructed	25
02.Number of Units Used	25
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	25
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	25
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	23
15.Renovated to Family Suite	0
16.Delta renovation	-2

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on lower appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appears to be in good condition. The steel siding is in fair condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed, with insulated glass. They are in poor condition.
- Recommendation: Replace existing windows with new aluminum framed, insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass and in good condition. The other doors to the exterior are hollow metal, and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the interior wood doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpeting is in fair condition. The VCT is in fair condition.
- Recommendation: Replace the carpet. Replace the VCT with sheet vinyl flooring.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted, and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sink with vanity units are in fair condition.
- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition. The incandescent fixtures are in fair condition.
- Recommendation: Install a new main service panel. Replace the existing fixtures with energy efficient fluorescent fixtures.

Communications and Security

- Analysis: A Safetech system is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	1.62%	\$12,997.26
Parking: AC Pavement Damaged or Failing		\$12,997.26
06 Wood & Plastics	7.83%	\$62,771.50
Cabinets: Damaged or Failing		\$62,771.50
07 Thermal & Moisture Protection	1.43%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	14.98%	\$120,143.04
Al. Windows - Beyond Useful Life		\$22,691.84
Wood Door - Beyond Useful Life		\$97,451.20
09 Finishes	9.24%	\$74,083.96
Carpet: Beyond Useful Life		\$3,897.20
Carpet: Damaged or Failing		\$27,900.50
FRP Wainscot: Damaged or Failing		\$6,331.71
Interior ceilings: Paint Failing		\$6,555.00
Interior walls: Paint failing		\$16,400.82
VCT: Damaged or Failing		\$12,998.73
13 Special Construction	6.48%	\$51,970.23
Fire Sprinklers: Missing or Inadequate		\$51,970.23
15 Mechanical	20.51%	\$164,496.56
Pipe, domestic water: Beyond expected useful life		\$30,280.78
PTAC: Beyond expected useful life		\$43,899.60
Restroom exhaust: Beyond expected useful life		\$40,494.47
Sink & vanity: Replace due to remodel		\$21,828.78
Water closet: Beyond expected useful life		\$27,992.93
16 Electrical	22.32%	\$178,999.05
Branch Circuits: Beyond Expected Useful Life		\$41,126.35
Fixture: Incandescent fixture beyond expected life		\$118,193.75
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	15.59%	\$125,000.00
Hard and soft goods: Beyond expected useful life		\$125,000.00
Total Raw Cost	100.00%	\$801,920.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,410.56
Force Protection	9.00%	\$79,787.03
General Conditions	10.00%	\$80,192.00
Total Additional Hard Cost		\$164,389.59

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$96,630.96
SIOH Conus	6.50%	\$69,091.14
Design	10.00%	\$96,630.96
08 MYr Inflation Fct	9.93%	\$122,006.20
Total Soft Cost		\$384,359.25
Total Project		\$1,350,668.84

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.90%	\$63,194.12
Parking Lots		\$22,328.80
Site Earthwork		\$40,865.32
03 Concrete	14.42%	\$233,476.40
Floor Construction		\$134,556.20
Slab on Grade		\$30,204.90
Stair Construction		\$8,305.50
Standard Foundations		\$60,409.80
04 Masonry	5.78%	\$93,647.68
Exterior Walls		\$93,647.68
07 Thermal & Moisture Protection	6.69%	\$108,400.50
Roof Construction		\$33,611.61
Roof Coverings		\$74,788.89
08 Doors & Windows	9.92%	\$160,743.63
Exterior Doors		\$11,102.25
Exterior Windows		\$122,040.00
Interior Doors		\$27,601.38
09 Finishes	13.03%	\$211,048.41
Ceiling Finishes		\$32,469.79
Floor Finishes		\$79,872.23
Partitions		\$56,388.42
Wall Finishes		\$42,317.96
10 Specialties	0.11%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.62%	\$90,965.00
Other Equipment		\$90,965.00
13 Special Construction	4.49%	\$72,733.40
Communications & Security		\$32,742.11
Sprinklers		\$39,991.29
15 Mechanical	22.17%	\$359,013.43
Cooling Generating Systems		\$96,655.68
Domestic Water Dist		\$46,782.00
Plumbing Fixtures		\$215,575.75
16 Electrical	6.77%	\$109,663.11
Electrical Service & Distribution		\$107,182.76
Site Lighting		\$2,480.35
19 FF&E	7.10%	\$115,000.00
Interior FF&E allowance		\$115,000.00
Total Raw Cost	100.00%	\$1,619,589.70

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$8,907.74
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$161,958.97
Total Additional Hard Cost		\$170,866.71

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$89,522.82
SIOH Conus	6.50%	\$122,198.65
Design	10.00%	\$179,045.64
08 MYr Inflation Fct	9.93%	\$216,595.50
Total Soft Cost		\$607,362.61
Total Project Cost for Replacement		\$2,397,819.03

INSERT BUILDING 4110 FLOOR PLAN HERE



*Ft. Leonard Wood, MO., Building 4111,
Exterior View*

Building 4111

Building 4111 is part of a complex of three two-story brick and aluminum siding buildings which were constructed in 1973. All three have sloped shingled roofs, and none have basements. Buildings 4111 contains 24 standard units with a full kitchen and a breakfast room for the three buildings.

Significant Assumptions

The replacement cost model is based on 24 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,342,255.00
Replacement Cost	\$2,485,600.00
Condition Assessment to Replacement Cost Ratio	54.00%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4111 is not recommended.

Attributes

01.Number of Units Constructed	25
02.Number of Units Used	24
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	24
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	24
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	24
15.Renovated to Family Suite	0
16.Delta renovation	-1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on the lower level is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding is in fair condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed, with insulated glass. They are in poor condition.
- Recommendation: Replace the existing windows with new aluminum framed, insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass in good condition. The other doors to the exterior are hollow metal, and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The drywall on metal stud partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the interior wood doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpeting is in fair condition. The VCT is in fair condition.
- Recommendation: Replace the carpet. Replace the VCT with sheet vinyl flooring.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted, and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sink with vanity units are in fair condition.
- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition. The incandescent fixtures are in fair condition.
- Recommendation: Install a new main service panel. Replace the existing fixtures with energy efficient fluorescent fixtures.

Communications and Security

- Analysis: A Safetech system is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	1.63%	\$12,997.26
Parking: AC Pavement Damaged or Failing		\$12,997.26
06 Wood & Plastics	7.88%	\$62,771.50
Cabinets: Damaged or Failing		\$62,771.50
07 Thermal & Moisture Protection	1.44%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	15.08%	\$120,143.04
Al. Windows - Beyond Useful Life		\$22,691.84
Wood Door - Beyond Useful Life		\$97,451.20
09 Finishes	9.30%	\$74,089.31
Carpet: Beyond Useful Life		\$3,897.20
Carpet: Damaged or Failing		\$27,900.50
FRP Wainscot: Damaged or Failing		\$6,331.71
Interior ceilings: Paint Failing		\$6,560.35
Interior walls: Paint failing		\$16,400.82
VCT: Damaged or Failing		\$12,998.73
13 Special Construction	6.52%	\$51,970.23
Fire Sprinklers: Missing or Inadequate		\$51,970.23
15 Mechanical	20.64%	\$164,496.56
Pipe, domestic water: Beyond expected useful life		\$30,280.78
PTAC: Beyond expected useful life		\$43,899.60
Restroom exhaust: Beyond expected useful life		\$40,494.47
Sink & vanity: Replace due to remodel		\$21,828.78
Water closet: Beyond expected useful life		\$27,992.93
16 Electrical	22.46%	\$178,999.05
Branch Circuits: Beyond Expected Useful Life		\$41,126.35
Fixture: Incandescent fixture beyond expected life		\$118,193.75
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	15.06%	\$120,000.00
Hard and soft goods: Beyond expected useful life		\$120,000.00
Total Raw Cost	100.00%	\$796,925.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,383.09
Force Protection	9.00%	\$79,290.05
General Conditions	10.00%	\$79,692.50
Total Additional Hard Cost		\$163,365.64

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$96,029.06
SIOH Conus	6.50%	\$68,660.78
Design	10.00%	\$96,029.06
08 MYr Inflation Fct	9.93%	\$121,246.25
Total Soft Cost		\$381,965.16
Total Project		\$1,342,255.80

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.91%	\$65,673.76
Parking Lots		\$23,187.60
Site Earthwork		\$42,486.16
03 Concrete	14.52%	\$243,805.44
Floor Construction		\$141,280.54
Slab on Grade		\$31,408.35
Stair Construction		\$8,305.50
Standard Foundations		\$62,811.05
04 Masonry	5.76%	\$96,630.09
Exterior Walls		\$96,630.09
07 Thermal & Moisture Protection	6.71%	\$112,668.75
Roof Construction		\$34,927.32
Roof Coverings		\$77,741.43
08 Doors & Windows	9.90%	\$166,199.27
Exterior Doors		\$11,102.25
Exterior Windows		\$126,560.00
Interior Doors		\$28,537.02
09 Finishes	13.09%	\$219,713.92
Ceiling Finishes		\$33,842.98
Floor Finishes		\$83,246.29
Partitions		\$58,555.83
Wall Finishes		\$44,068.82
10 Specialties	0.10%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.65%	\$94,920.00
Other Equipment		\$94,920.00
13 Special Construction	4.50%	\$75,624.50
Communications & Security		\$34,043.59
Sprinklers		\$41,580.92
15 Mechanical	21.93%	\$368,194.68
Cooling Generating Systems		\$100,497.68
Domestic Water Dist		\$48,816.00
Plumbing Fixtures		\$218,881.00
16 Electrical	6.78%	\$113,745.24
Electrical Service & Distribution		\$111,264.89
Site Lighting		\$2,480.35
19 FF&E	7.15%	\$120,000.00
Interior FF&E allowance		\$120,000.00
Total Raw Cost	100.00%	\$1,678,879.69

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,233.84
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$167,887.97
Total Additional Hard Cost		\$177,121.81

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$92,800.07
SIOH Conus	6.50%	\$126,672.10
Design	10.00%	\$185,600.15
08 MYr Inflation Fct	9.93%	\$224,524.63
Total Soft Cost		\$629,596.96
Total Project Cost for Replacement		\$2,485,598.45

INSERT BUILDING 4111 FLOOR PLAN HERE



Building 4112

Building 4112 is part of a complex of three two-story brick and aluminum siding buildings which were constructed in 1973. All three have sloped shingled roofs, and none have basements. Buildings 4112 contains 25 standard units with a full kitchen.

Significant Assumptions

The replacement cost model is based on 24 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,363,430.00
Replacement Cost	\$2,485,600.00
Condition Assessment to Replacement Cost Ratio	54.85%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4112 is not recommended.

Attributes

01.Number of Units Constructed	25
02.Number of Units Used	25
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	25
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	25
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	24
15.Renovated to Family Suite	0
16.Delta renovation	-1

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on the lower level is in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding is in fair condition.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed, with insulated glass. They are in poor condition.
- Recommendation: Replace the existing windows with new aluminum framed, insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass in good condition. The other doors to the exterior are hollow metal, and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The drywall on metal stud partitions are in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the interior wood doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpeting is in fair condition. The VCT is in fair condition.
- Recommendation: Replace the carpet. Replace the VCT with sheet vinyl flooring.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted, and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sink with vanity units are in fair condition.
- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition. The incandescent fixtures are in fair condition.
- Recommendation: Install a new main service panel. Replace the existing fixtures with energy efficient fluorescent fixtures.

Communications and Security

- Analysis: A Safetech system is installed and is in good condition.
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.57%	\$20,795.62
Parking: AC Pavement Damaged or Failing		\$20,795.62
06 Wood & Plastics	7.75%	\$62,771.50
Cabinets: Damaged or Failing		\$62,771.50
07 Thermal & Moisture Protection	1.42%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	14.84%	\$120,143.04
Al. Windows - Beyond Useful Life		\$22,691.84
Wood Door - Beyond Useful Life		\$97,451.20
09 Finishes	9.12%	\$73,861.28
Carpet: Beyond Useful Life		\$3,897.20
Carpet: Damaged or Failing		\$27,900.50
FRP Wainscot: Damaged or Failing		\$6,331.71
Interior ceilings: Paint Failing		\$6,332.32
Interior walls: Paint failing		\$16,400.82
VCT: Damaged or Failing		\$12,998.73
13 Special Construction	6.42%	\$51,970.23
Fire Sprinklers: Missing or Inadequate		\$51,970.23
15 Mechanical	20.32%	\$164,496.56
Pipe, domestic water: Beyond expected useful life		\$30,280.78
PTAC: Beyond expected useful life		\$43,899.60
Restroom exhaust: Beyond expected useful life		\$40,494.47
Sink & vanity: Replace due to remodel		\$21,828.78
Water closet: Beyond expected useful life		\$27,992.93
16 Electrical	22.11%	\$178,999.05
Branch Circuits: Beyond Expected Useful Life		\$41,126.35
Fixture: Incandescent fixture beyond expected life		\$118,193.75
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	15.44%	\$125,000.00
Hard and soft goods: Beyond expected useful life		\$125,000.00
Total Raw Cost	100.00%	\$809,495.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,452.22
Force Protection	9.00%	\$80,540.71
General Conditions	10.00%	\$80,949.50
Total Additional Hard Cost		\$165,942.43

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$97,543.74
SIOH Conus	6.50%	\$69,743.78
Design	10.00%	\$97,543.74
08 MYr Inflation Fct	9.93%	\$123,158.68
Total Soft Cost		\$387,989.94
Total Project		\$1,363,427.37

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.91%	\$65,673.76
Parking Lots		\$23,187.60
Site Earthwork		\$42,486.16
03 Concrete	14.52%	\$243,805.44
Floor Construction		\$141,280.54
Slab on Grade		\$31,408.35
Stair Construction		\$8,305.50
Standard Foundations		\$62,811.05
04 Masonry	5.76%	\$96,630.09
Exterior Walls		\$96,630.09
07 Thermal & Moisture Protection	6.71%	\$112,668.75
Roof Construction		\$34,927.32
Roof Coverings		\$77,741.43
08 Doors & Windows	9.90%	\$166,199.27
Exterior Doors		\$11,102.25
Exterior Windows		\$126,560.00
Interior Doors		\$28,537.02
09 Finishes	13.09%	\$219,713.92
Ceiling Finishes		\$33,842.98
Floor Finishes		\$83,246.29
Partitions		\$58,555.83
Wall Finishes		\$44,068.82
10 Specialties	0.10%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.65%	\$94,920.00
Other Equipment		\$94,920.00
13 Special Construction	4.50%	\$75,624.50
Communications & Security		\$34,043.59
Sprinklers		\$41,580.92
15 Mechanical	21.93%	\$368,194.68
Cooling Generating Systems		\$100,497.68
Domestic Water Dist		\$48,816.00
Plumbing Fixtures		\$218,881.00
16 Electrical	6.78%	\$113,745.24
Electrical Service & Distribution		\$111,264.89
Site Lighting		\$2,480.35
19 FF&E	7.15%	\$120,000.00
Interior FF&E allowance		\$120,000.00
Total Raw Cost	100.00%	\$1,678,879.69

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,233.84
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$167,887.97
Total Additional Hard Cost		\$177,121.81

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$92,800.07
SIOH Conus	6.50%	\$126,672.10
Design	10.00%	\$185,600.15
08 MYr Inflation Fct	9.93%	\$224,524.63
Total Soft Cost		\$629,596.96
Total Project Cost for Replacement		\$2,485,598.45

INSERT BUILDING 4112 FLOOR PLAN HERE



*Ft. Leonard Wood, MO., Building 4113,
Exterior View*

Building 4113

Building 4113 is part of a complex of three two-story brick and aluminum siding buildings constructed in 1973. All three have sloped shingled roofs, and none have basements. Building 4113 has 16 family suites with a full kitchen. The breakfast area is also located in this building, in a converted room.

Significant Assumptions

The replacement cost model is based on 25 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,332,300.00
Replacement Cost	\$2,569,770.00
Condition Assessment to Replacement Cost Ratio	51.85%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4113 is not recommended.

Attributes

01.Number of Units Constructed	17
02.Number of Units Used	16
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	16
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	0
12.Operating as Family Suite	16
13.Renovated to Standard	0
14.Renovated to Extended Stay	25
15.Renovated to Family Suite	0
16.Delta renovation	8

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on lower level appears to be in good condition.
- Recommendation: No corrective action required.

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler between the brick area has failing paint.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed with insulated glass. Originally installed in 1973.
- Recommendation: Replace the existing units with new aluminum frames and insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass, and are in good condition. The other doors to exterior are hollow metal and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the wood interior doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in good to fair condition.
- Recommendation: Repaint the walls.

Floor Finishes

- Analysis: The carpet and VCT are in fair condition.
- Recommendation: Replace the carpet and VCT.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted, and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sinks with vanity units are in fair condition.
- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC**Cooling Generating Systems**

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection**Sprinklers**

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical**Electrical Service/Distribution**

- Analysis: The current electrical main service and main service are in fair condition.
- Recommendation: Install a new main service panel. Replace the fixtures with energy efficient fluorescent fixtures

Communications and Security

- Analysis: A Safetech system is installed and is in good condition
- Recommendation: No corrective action required.

Equipment**Other Equipment**

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation**Site Earthwork**

- Analysis: The site appears to be in good condition
- Recommendation: No corrective action required.

Site Improvements**Parking Lots**

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities**Site Lighting**

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.63%	\$20,795.62
Parking: AC Pavement Damaged or Failing		\$20,795.62
06 Wood & Plastics	4.06%	\$32,139.01
Cabinets: Damaged or Failing		\$32,139.01
07 Thermal & Moisture Protection	1.45%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	17.71%	\$140,077.03
Al. Windows - Beyond Useful Life		\$24,110.09
Wood Door - Beyond Useful Life		\$115,966.94
09 Finishes	15.75%	\$124,560.22
Carpet: Beyond Useful Life		\$23,247.97
Interior ceilings: Paint Failing		\$6,264.31
VCT: Damaged or Failing		\$15,494.52
Vinyl Wall Covering: Damaged or Failing		\$79,553.42
13 Special Construction	6.62%	\$52,377.20
Fire Sprinklers: Missing or Inadequate		\$52,377.20
15 Mechanical	18.88%	\$149,340.53
Pipe, domestic water: Beyond expected useful life		\$30,518.81
PTAC: Beyond expected useful life		\$57,407.16
Restroom exhaust: Beyond expected useful life		\$27,535.80
Sink & vanity: Replace due to remodel		\$14,843.57
Water closet: Beyond expected useful life		\$19,035.19
16 Electrical	22.79%	\$180,266.69
Branch Circuits: Beyond Expected Useful Life		\$41,478.40
Fixture: Incandescent fixture beyond expected life		\$119,109.34
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	10.11%	\$80,000.00
Hard and soft goods: Beyond expected useful life		\$80,000.00
Total Raw Cost	100.00%	\$791,014.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,350.58
Force Protection	9.00%	\$78,701.94
General Conditions	10.00%	\$79,101.40
Total Additional Hard Cost		\$162,153.91

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$95,316.79

SIOH Conus	6.50%	\$68,151.51
Design	10.00%	\$95,316.79
08 MYr Inflation Fct	9.93%	\$120,346.93
Total Soft Cost		\$379,132.02
Total Project		\$1,332,299.94

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.93%	\$68,153.41
Parking Lots		\$24,046.40
Site Earthwork		\$44,107.01
03 Concrete	14.51%	\$251,868.84
Floor Construction		\$145,744.89
Slab on Grade		\$32,606.15
Stair Construction		\$8,305.50
Standard Foundations		\$65,212.30
04 Masonry	5.70%	\$99,016.02
Exterior Walls		\$99,016.02
07 Thermal & Moisture Protection	6.74%	\$117,004.19
Roof Construction		\$36,326.56
Roof Coverings		\$80,677.62
08 Doors & Windows	9.89%	\$171,654.91
Exterior Doors		\$11,102.25
Exterior Windows		\$131,080.00
Interior Doors		\$29,472.66
09 Finishes	13.18%	\$228,737.20
Ceiling Finishes		\$35,212.88
Floor Finishes		\$86,620.34
Partitions		\$61,027.33
Wall Finishes		\$45,876.64
10 Specialties	0.10%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.70%	\$98,875.00
Other Equipment		\$98,875.00
13 Special Construction	4.52%	\$78,515.61
Communications & Security		\$35,345.07
Sprinklers		\$43,170.54
15 Mechanical	21.74%	\$377,375.93
Cooling Generating Systems		\$104,339.68
Domestic Water Dist		\$50,850.00
Plumbing Fixtures		\$222,186.25
16 Electrical	6.79%	\$117,827.36
Electrical Service & Distribution		\$115,347.01
Site Lighting		\$2,480.35
19 FF&E	7.20%	\$125,000.00
Interior FF&E allowance		\$125,000.00
Total Raw Cost	100.00%	\$1,735,732.50

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,546.53
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$173,573.25
Total Additional Hard Cost		\$183,119.78

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$95,942.61
SIOH Conus	6.50%	\$130,961.67
Design	10.00%	\$191,885.23
08 MYr Inflation Fct	9.93%	\$232,127.83
Total Soft Cost		\$650,917.34
Total Project Cost for Replacement		\$2,569,769.61

INSERT BUILDING 4113 FLOOR PLAN HERE

Building 4114

Building 4114 is part of a complex of three two-story brick and aluminum siding buildings constructed in 1973. All three have sloped shingled roofs, and none have basements. Building 4114 has 17 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 25 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,336,345.00
Replacement Cost	\$2,569,770.00
Condition Assessment to Replacement Cost Ratio	52.00%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4114 is not recommended.

Attributes

01.Number of Units Constructed	17
02.Number of Units Used	17
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	17
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	17
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	25
15.Renovated to Family Suite	0
16.Delta renovation	8

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on the lower level appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete, and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler between the brick areas has failing paint.
- Recommendation: Replace the steel siding with vinyl siding

Exterior Windows

- Analysis: The exterior windows are aluminum framed, with insulated glass, original installed in 1973.
- Recommendation: Replace the existing windows with new aluminum framed, insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass, and are in good condition. The other doors to the exterior are hollow metal, and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998, and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs is in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the wood interior doors.

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in fair condition. The vinyl wall coverings are in fair condition.
- Recommendation: Repaint the walls. Replace the vinyl wall coverings.

Floor Finishes

- Analysis: The carpeting and VCT are in fair condition.
- Recommendation: Replace the carpet and VCT.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted, and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas, and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sinks with vanity units are in fair condition.

- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition. The incandescent fixtures are in fair condition.
- Recommendation: Install a new main service panel. Replace the fixtures with energy efficient fluorescent fixtures

Communications and Security

- Analysis: A Safetech system is installed and is in good condition
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition.
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace the asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.29%	\$18,196.16
Parking: AC Pavement Damaged or Failing		\$18,196.16
06 Wood & Plastics	4.05%	\$32,139.01
Cabinets: Damaged or Failing		\$32,139.01
07 Thermal & Moisture Protection	1.44%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	17.65%	\$140,077.03
Al. Windows - Beyond Useful Life		\$24,110.09
Wood Door - Beyond Useful Life		\$115,966.94
09 Finishes	15.70%	\$124,560.22
Carpet: Beyond Useful Life		\$23,247.97
Interior ceilings: Paint Failing		\$6,264.31
VCT: Damaged or Failing		\$15,494.52
Vinyl Wall Covering: Damaged or Failing		\$79,553.42
13 Special Construction	6.60%	\$52,377.20
Fire Sprinklers: Missing or Inadequate		\$52,377.20
15 Mechanical	18.82%	\$149,340.53
Pipe, domestic water: Beyond expected useful life		\$30,518.81
PTAC: Beyond expected useful life		\$57,407.16
Restroom exhaust: Beyond expected useful life		\$27,535.80
Sink & vanity: Replace due to remodel		\$14,843.57
Water closet: Beyond expected useful life		\$19,035.19
16 Electrical	22.72%	\$180,266.69
Branch Circuits: Beyond Expected Useful Life		\$41,478.40
Fixture: Incandescent fixture beyond expected life		\$119,109.34
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	10.71%	\$85,000.00
Hard and soft goods: Beyond expected useful life		\$85,000.00
Total Raw Cost	100.00%	\$793,415.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,363.78
Force Protection	9.00%	\$78,940.83
General Conditions	10.00%	\$79,341.50
Total Additional Hard Cost		\$162,646.11

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$95,606.11

SIOH Conus	6.50%	\$68,358.37
Design	10.00%	\$95,606.11
08 MYr Inflation Fct	9.93%	\$120,712.23
Total Soft Cost		\$380,282.82
Total Project		\$1,336,343.93

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.93%	\$68,153.41
Parking Lots		\$24,046.40
Site Earthwork		\$44,107.01
03 Concrete	14.51%	\$251,868.84
Floor Construction		\$145,744.89
Slab on Grade		\$32,606.15
Stair Construction		\$8,305.50
Standard Foundations		\$65,212.30
04 Masonry	5.70%	\$99,016.02
Exterior Walls		\$99,016.02
07 Thermal & Moisture Protection	6.74%	\$117,004.19
Roof Construction		\$36,326.56
Roof Coverings		\$80,677.62
08 Doors & Windows	9.89%	\$171,654.91
Exterior Doors		\$11,102.25
Exterior Windows		\$131,080.00
Interior Doors		\$29,472.66
09 Finishes	13.18%	\$228,737.20
Ceiling Finishes		\$35,212.88
Floor Finishes		\$86,620.34
Partitions		\$61,027.33
Wall Finishes		\$45,876.64
10 Specialties	0.10%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.70%	\$98,875.00
Other Equipment		\$98,875.00
13 Special Construction	4.52%	\$78,515.61
Communications & Security		\$35,345.07
Sprinklers		\$43,170.54
15 Mechanical	21.74%	\$377,375.93
Cooling Generating Systems		\$104,339.68
Domestic Water Dist		\$50,850.00
Plumbing Fixtures		\$222,186.25
16 Electrical	6.79%	\$117,827.36
Electrical Service & Distribution		\$115,347.01
Site Lighting		\$2,480.35
19 FF&E	7.20%	\$125,000.00
Interior FF&E allowance		\$125,000.00
Total Raw Cost	100.00%	\$1,735,732.50

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,546.53
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$173,573.25
Total Additional Hard Cost		\$183,119.78

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$95,942.61
SIOH Conus	6.50%	\$130,961.67
Design	10.00%	\$191,885.23
08 MYr Inflation Fct	9.93%	\$232,127.83
Total Soft Cost		\$650,917.34
Total Project Cost for Replacement		\$2,569,769.61

INSERT BUILDING 4114 FLOOR PLAN HERE



Fort Leonard Wood, MO, Building 4115

Building 4115

Building 4115 is part of a complex of three two-story brick and aluminum siding buildings constructed in 1973. All three have sloped shingled roofs, and none have basements. Building 4115 has 17 family suites with a full kitchen.

Significant Assumptions

The replacement cost model is based on 25 extended stay rooms.

The renovation plan, if required, would use the existing foot print with the plan reworked to meet current lodging size requirements.

The replacement cost model includes any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix

All costs are adjusted by the Area Cost Factor of 113% for Ft Leonard Wood.

Cost Analysis

Condition Assessment	\$1,336,345.00
Replacement Cost	\$2,569,770.00
Condition Assessment to Replacement Cost Ratio	52.00%

Because the Condition Assessment to Replacement Cost Ratio is greater than 50%, renovation of Building 4115 is not recommended.

Attributes

01.Number of Units Constructed	17
02.Number of Units Used	17
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	17
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	17
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	25
15.Renovated to Family Suite	0
16.Delta renovation	8

Condition Analysis/Recommendation

FF&E

FF&E Allowance

- Analysis: The hard goods consist of beds, head boards, night stands, chest of drawers, easy chairs, dining tables with chairs, TV's, Bookcase/TV Cabinet, desks with chair, and lamps. The soft goods consist of drapes on the windows. They are in fair condition.
- Recommendation: Replace the hard and soft goods.

Foundations

Standard Foundations

- Analysis: The foundation is of cast in place concrete. No clear failures can be seen from the perimeter. The foundation is in good condition.
- Recommendation: No corrective action required.

Slab on Grade

- Analysis: The concrete floor on the lower level appears to be in good condition.
- Recommendation: No corrective action required

Superstructure

Floor Construction

- Analysis: The lower level is SOG concrete, and appears to be in good condition. The upper level is wood joist construction. The floor framing appears to be in good condition.
- Recommendation: No corrective action required.

Roof Construction

- Analysis: The roof consists of wood decking attached to sloped wooden rafters. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

Exterior Enclosure

Exterior Walls

- Analysis: The brick walls appear to be in good condition. The steel siding filler areas between the brick has failing paint.
- Recommendation: Replace the steel siding with vinyl siding.

Exterior Windows

- Analysis: The exterior windows are aluminum framed, with insulated glass, originally installed in 1973.
- Recommendation: Replace the existing units with new aluminum framed, insulated glass units.

Exterior Doors

- Analysis: The main entry exterior doors and sidelites are aluminum and glass, and in good condition. The other doors to the exterior are hollow metal, and are in good condition.

- Recommendation: No corrective action required.

Roofing

Roof Coverings

- Analysis: The roof covering is three tab asphalt shingles on a wood deck. The roof covering was installed in 1998 and appears to be in good condition.
- Recommendation: No corrective action required.

Interior Construction

Partitions

- Analysis: The gypsum board on metal studs in good condition.
- Recommendation: No corrective action required.

Interior Doors

- Analysis: The interior doors are in good condition.
- Recommendation: Replace the wood interior doors

Fittings

- Analysis: The electronic locks on the wood guest unit entry doors are in good condition. The unit interior doors and associated hardware are in fair condition.
- Recommendation: Replace the standard hardware in the guest units.

Stairs

Stair Construction

- Analysis: The wood stairs are in good condition.
- Recommendation: No corrective action required.

Interior Finishes

Wall Finishes

- Analysis: The walls are painted. The walls and paint are in good to fair condition. The vinyl wall covering is in fair condition.
- Recommendation: Repaint the walls. Replace the vinyl wall coverings.

Floor Finishes

- Analysis: The carpet and VCT are in fair condition.
- Recommendation: Replace the carpet and VCT.

Ceiling Finishes

- Analysis: The ceiling in the corridors and common areas are painted and appear to be in fair condition. The ceilings in the guest rooms are painted. The ceiling paint is in fair condition.
- Recommendation: Repaint the ceiling in the corridors and common areas and repaint the guest room ceilings.

Plumbing

Plumbing Fixtures

- Analysis: The sinks with vanity units are in fair condition.
- Recommendation: Replace the sink and vanity.

Domestic Water Distribution

- Analysis: The water distribution system is in good condition.
- Recommendation: No corrective action required.

HVAC

Cooling Generating Systems

- Analysis: The existing PTAC units are in fair condition.
- Recommendation: Install new PTAC units.

Fire Protection

Sprinklers

- Analysis: The building currently has no fire sprinkler system.
- Recommendation: Install a fire sprinkler system.

Electrical

Electrical Service/Distribution

- Analysis: The current electrical main service is in fair condition. The incandescent fixtures are in fair condition.
- Recommendation: Install a new main service panel. Replace the fixtures with energy efficient fluorescent fixtures.

Communications and Security

- Analysis: A Safetech system is installed and is in good condition
- Recommendation: No corrective action required.

Equipment

Other Equipment

- Analysis: The other equipment is in good condition.
- Recommendation: No corrective action required.

Site Preparation

Site Earthwork

- Analysis: The site appears to be in good condition
- Recommendation: No corrective action required.

Site Improvements

Parking Lots

- Analysis: The paving is in fair condition.
- Recommendation: Remove and replace asphalt.

Site Electrical Utilities

Site Lighting

- Analysis: The site lighting appears to be in good condition.
- Recommendation: No corrective action required.

Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: No action required to renovate structure since the Condition Assessment cost is greater than 50% of the replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 470 and are not included in this building.

Condition Assessment/Renovation/Replacement Analysis

Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

Summary of Project Cost

CSI	Percent	Amount
02 Site Work	2.29%	\$18,196.16
Parking: AC Pavement Damaged or Failing		\$18,196.16
06 Wood & Plastics	4.05%	\$32,139.01
Cabinets: Damaged or Failing		\$32,139.01
07 Thermal & Moisture Protection	1.44%	\$11,458.20
Steel Siding: Damaged or Failing		\$11,458.20
08 Doors & Windows	17.65%	\$140,077.03
Al. Windows - Beyond Useful Life		\$24,110.09
Wood Door - Beyond Useful Life		\$115,966.94
09 Finishes	15.70%	\$124,560.22
Carpet: Beyond Useful Life		\$23,247.97
Interior ceilings: Paint Failing		\$6,264.31
VCT: Damaged or Failing		\$15,494.52
Vinyl Wall Covering: Damaged or Failing		\$79,553.42
13 Special Construction	6.60%	\$52,377.20
Fire Sprinklers: Missing or Inadequate		\$52,377.20
15 Mechanical	18.82%	\$149,340.53
Pipe, domestic water: Beyond expected useful life		\$30,518.81
PTAC: Beyond expected useful life		\$57,407.16
Restroom exhaust: Beyond expected useful life		\$27,535.80
Sink & vanity: Replace due to remodel		\$14,843.57
Water closet: Beyond expected useful life		\$19,035.19
16 Electrical	22.72%	\$180,266.69
Branch Circuits: Beyond Expected Useful Life		\$41,478.40
Fixture: Incandescent fixture beyond expected life		\$119,109.34
Main service: Beyond expected useful life		\$19,678.95
19 FF&E	10.71%	\$85,000.00
Hard and soft goods: Beyond expected useful life		\$85,000.00
Total Raw Cost	100.00%	\$793,415.00

Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,363.78
Force Protection	9.00%	\$78,940.83
General Conditions	10.00%	\$79,341.50
Total Additional Hard Cost		\$162,646.11

Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$95,606.11

SIOH Conus	6.50%	\$68,358.37
Design	10.00%	\$95,606.11
08 MYr Inflation Fct	9.93%	\$120,712.23
Total Soft Cost		\$380,282.82
Total Project		\$1,336,343.93

Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

Summary of Project Replacement Cost

CSI	Percent	Amount
02 Site Work	3.93%	\$68,153.41
Parking Lots		\$24,046.40
Site Earthwork		\$44,107.01
03 Concrete	14.51%	\$251,868.84
Floor Construction		\$145,744.89
Slab on Grade		\$32,606.15
Stair Construction		\$8,305.50
Standard Foundations		\$65,212.30
04 Masonry	5.70%	\$99,016.02
Exterior Walls		\$99,016.02
07 Thermal & Moisture Protection	6.74%	\$117,004.19
Roof Construction		\$36,326.56
Roof Coverings		\$80,677.62
08 Doors & Windows	9.89%	\$171,654.91
Exterior Doors		\$11,102.25
Exterior Windows		\$131,080.00
Interior Doors		\$29,472.66
09 Finishes	13.18%	\$228,737.20
Ceiling Finishes		\$35,212.88
Floor Finishes		\$86,620.34
Partitions		\$61,027.33
Wall Finishes		\$45,876.64
10 Specialties	0.10%	\$1,704.04
Fittings		\$1,704.04
11 Equipment	5.70%	\$98,875.00
Other Equipment		\$98,875.00
13 Special Construction	4.52%	\$78,515.61
Communications & Security		\$35,345.07
Sprinklers		\$43,170.54
15 Mechanical	21.74%	\$377,375.93
Cooling Generating Systems		\$104,339.68
Domestic Water Dist		\$50,850.00
Plumbing Fixtures		\$222,186.25
16 Electrical	6.79%	\$117,827.36
Electrical Service & Distribution		\$115,347.01
Site Lighting		\$2,480.35
19 FF&E	7.20%	\$125,000.00
Interior FF&E allowance		\$125,000.00
Total Raw Cost	100.00%	\$1,735,732.50

Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$9,546.53
Force Protection	0.00%	\$0.00

General Cond	10.00%	\$173,573.25
Total Additional Hard Cost		\$183,119.78

Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$95,942.61
SIOH Conus	6.50%	\$130,961.67
Design	10.00%	\$191,885.23
08 MYr Inflation Fct	9.93%	\$232,127.83
Total Soft Cost		\$650,917.34
Total Project Cost for Replacement		\$2,569,769.61

INSERT BUILDING 4115 FLOOR PLAN HERE

Army Lodging Wellness Recommendation

Appendix

ROOM / SPACE	1-10 Units	11-49 Units	50-149 Units	150-199 Units	200-299 Units	300-399 Units	400-599 Units	600-799 Units	800+	At Main Facility on Post Only	Note
Public Areas											
Exterior Entrance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Vestibule	100	100	150	150	200	200	200	200	200		In Main Lodging facilities square footage included in Lobby
Lobby (includes vestibule at Main Lodging facilities)	300-500	300-500	500-800	500-800	800-1000	800-1000	1,000-1,200	1,000-1,200	1,200-1,500	X	Includes square footage of vestibule at Main Lodging facilities
Front Desk	2 station / 100 s.f.	2 station / 100 s.f.	2 station / 100 s.f.	3 station / 150 s.f.	3 station / 150 s.f.	3 station / 250 s.f.	3 station / 250 s.f.	4 station / 300 s.f.	4 station / 300 s.f.	X	
Bell Cart Station	2 carts / 24 s.f.	2 carts / 24 s.f.	3 carts / 36 s.f.	3 carts / 36 s.f.	4 carts / 48 s.f.	4 carts / 48 s.f.	6 carts / 72 s.f.	6 carts / 72 s.f.	8 carts / 96 s.f.		Not required at facilities w/out interior corridors if building is retained.
Breakfast Bar (Seat/Svc)	550	550	550	550	550	550	550	750	1,000	X	Needed at secondary facility, if it is a remote location. CFSC requirement min 550
Passenger Elevators			1 @ 64 s.f. 50-99 rooms 2 @ 64 s.f. 100-149 rooms	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. 400-499 rooms 3 @ 64 s.f. 500-599 rooms	3 @ 64 s.f. each		If building is over two stories high
Stairs	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each	Number of stairs based on plan @ 230 s.f. each		
Public Corridors	**	**	**	**	**	**	**	**	**		Minimum 6' wide
Public Telephone Area	2 phones / 12 s.f.	2 phones / 12 s.f.	2 phones / 12 s.f.	2 phones / 12 s.f.	3 phones / 18 s.f.	3 phones / 18 s.f.	4 phones / 24 s.f.	4 phones / 24 s.f.	4 phones / 24 s.f.		House phone in secondary buildings. Pay phones & house phones at Main facility
Vending - Full Service	1 per building / 70 s.f.	1 per building / 70 s.f.	70	70	70-105	105-140	140-210	210-280	280+		1 for every other floor to support up to 200 units / 70 s.f. each
Vending - Ice Only	1 per building / 30 s.f.	1 per building / 30 s.f.	30	30	30-45	45-60	60-90	90-120	120+		1 for every other floor to support up to 200 units / 30 s.f. each
Women - Lobby	100	100	200	200	260	260	315	315	350	X	
Men - Lobby	100	100	200	200	260	260	315	315	350	X	
Multi-Purpose Rm	250	250	250	250	250	250	250	250	250	X	
Study Rooms	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note		1 per 25 extended stay units of 250 s.f. each at posts with schools facilities
Guest Laundries	192	192	192-384	384-576	576-768	768-1152	1152-1536	1536-2112	2112+		CFSC requirement 2w/d for every 75 guest rooms
Gear Wash Rooms	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each		Only at facilities with outdoor training
Guest Bulk Storage	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note		1 unit for every 4 family suites of 25 ea. 40 w/circ.
Guest Rooms											
Guest Room - Standard	300	300	300	300	300	300	300	300			
Guest Room - Ext. Stay	300	300	300	300	300	300	300	300			
Guest Room - Suites	450	450	450	450	450	450	450	450			

ROOM / SPACE	1-10 Units	11-49 Units	50-149 Units	150-199 Units	200-299 Units	300-399 Units	400-599 Units	600-799 Units	800+	At Main Facility on Post Only	Note
Back-of-House Areas											
Manager's Office	180	180	180	180	180	180	180	180	180	X	
Assist. Mgr. Off.	-	-	0 50-99 units 120 100-149 units	120	120	120	120	120	120	X	
Front Office Mgr.	100	100	100	100	100	100	100	100	100	X	
Admin. Offices	2 space / 200-250 s.f.	2 space / 200-250 s.f.	2 spaces / 200-250 s.f.	2 spaces / 200-250 s.f.	5 spaces / 500-600 s.f.	5 spaces / 500-600 s.f.	7 spaces / 800-900 s.f.	7 spaces / 800-900 s.f.	10 spaces / 1,100-1,200 s.f.	X	
Cash Room	50	50	75	75	100	100	125	125	150	X	
Luggage Storage	-	-	75	75	100	100	100	100	100	X	
Admin. Conf. Rm.	250	250	250	250	350	350	350	350	350	X	
Housekeeping Off.	120	120	120	120	120	120	120	120	120	X	
Dirty/Clean Linen Stor.	50	50	50	50	100	100	200	200	400	See Note	At all facilities w/out in-house laundry
In-House Laundry	500	500	500	500	500	500	750	750	900	X	CFSC requirement min 500 s.f
Receiving Office	75	75	75	75	75	75	75	75	75	X	
Maintenance Area	100	100	175	175	250	250	400	400	600	X	
Kitchen Prep Room	150	150	150	150	150	150	150	150	150	X	facility, if it is a remote location.
Break Room		140	210	210	280	280	350	350	420		
Staff Toilet - Men			200	100	100	100	150	150	200		
Staff Toilet - Women		100	100	100	150	150	200	200	250		
Access Corridor	**	**	**	**	**	**	**	**	**		
Receiving	150	150	150	150	150	150	150	150	200	X	
Housekeep. Rms.	128	128-512	512-1280	1280-1792	1792-2560	2560-3456	3456-5120	5120-6912	6912+		128 s.f. for each 15 guest rooms
Service Elevator	80	80	80	80	80	80	80	80	80		
Data/Commo Rm.	100	100	100	100	150	150	150	150	150		
Switch Closets	16 *	16 *	16-48 *	48-64 *	64-96 *	96-128 *	128-144 *	144-256 *	256+ *		1 closet of 16 s.f. for approximately 50 guest rooms
Janitor Closet	50	50	50	50	50	50	50	50	50	X	Only at first floor of Main Lodging facility.
Mechanical Room	*	*	*	*	*	*	*	*	*		
General Stor. Rm.	500	500	500	500	500	500	500	500	500	X	
Bulk Storage Rm.	500	500	500	500	500	500	500	500	500	X	
Electrical Room	140 *	140 *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *		One electrical room to serve no more than 100 rooms.
Elevator Equip.Rm.	84	84	84	84	84	84	84	84	84		
EXTERIOR											
Playground (Outdoor)										X	Play ground required at facilities with family stays.
Grounds Maintenance	400	400	400	400	400	400	400	400	400	X	

* Mechanical/electrical/equipment Spaces to be determined by contractor based on appropriate code and recommended systems.

** Corridors to be determined based on building layout.